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## BRINGING I.T. BACK HOME

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## TEST YOUR EMOTIONAL I.Q.

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## FIND OUT IF CHARGEBACK IS RIGHT FOR YOU

...And How to Make It  
an Alignment Tool, Not a  
Political Albatross

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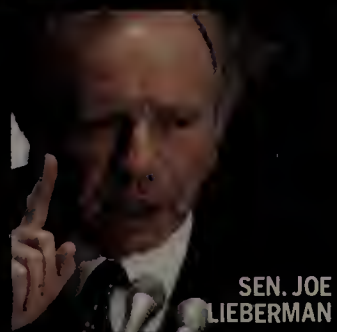
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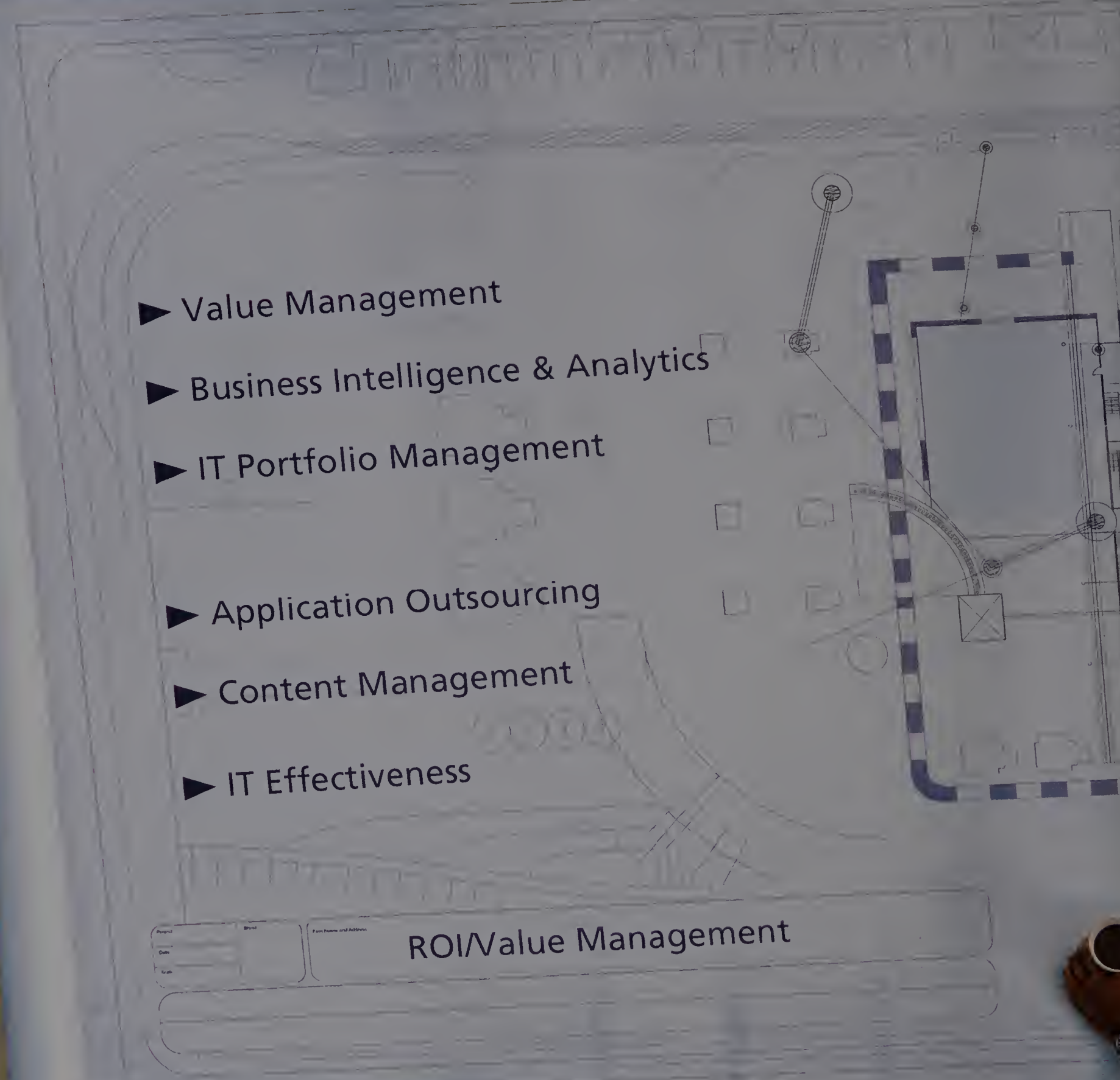


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LIEBERMAN

# Inside the Biggest E-Government Push Ever

The Dollars. The Players. The Obstacles. The Future. Page 44



- 
- ▶ Value Management
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VOL. 16 • NO. 10 • MARCH 1, 2003

## Cover Story

E-GOVERNMENT | 44

# A More Perfect Union

President George Bush signed the E-Government Act of 2002 into effect last December, taking a giant step toward launching the federal government into the information age. We break down the costs, the players, the hurdles and its future.

By Todd Datz



The E-Government Act's major players (clockwise from top left): President Bush, Agriculture Department Deputy CIO Ira Hobbs, Sen. Joe Lieberman and Rep. Tom Davis.

## Features

### OUTSOURCING

#### Bringing IT Back Home | 54

Faced with a tight economy, CIOs are scrutinizing everything—including outsourcing. A number of them have taken back the keys to their shops, saving lots of cash. Here's how you can do it too. By Stephanie Overby



54

Chicago's Metropolitan Pier and Exposition Authority CIO **Ellen Barry** had to fight a political battle to get rid of her outsourcer.

### CASE FILES | INTEGRATION INITIATIVES

#### Jailhouse Talk | 65

Overcrowded jails, criminals slipping through the cracks, missing case file information—Maricopa County's law enforcement agencies desperately needed to start sharing information.

By Todd Datz

### BUDGETING

#### Chargeback for Good or Evil | 70

Charging users for IT costs can rein in budgets and bring rigor to planning, but it can also turn you into an unpopular bean counter. By Malcolm Wheatley

### MANAGEMENT SKILLS

#### Are You the Strong, Sensitive Type? | 78

CIOs who cultivate a sensitivity to others' needs are better managers and lead more effective organizations. Take our quiz to see where you stand. By Meridith Levinson

MORE ►►►



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## Columns

### NET GAINS

#### Real-Time Reality Check | 37

The Real-Time Enterprise is the next hyped thing. Don't get swept away.

*By Mohanbir Sawhney*

### PEER TO PEER

#### Straddling the Great Divide | 40

The CIO of a Chicago trading company—who knew nothing about the business when he started—tells us how he won over the suits. And his technological know-how had little to do with it.

*By Dieter Marlovics*

## Sections

### TRENDLINES | 20

A prescription for health care's ills; End of the billion-dollar outsourcing deals?; MBA job forecast: cold. *And more*

#### BY THE NUMBERS | 26

To get the vendor support you're paying for, you need to know what's possible.

#### ON THE MOVE | 30

CIOs on the go—see where your IT peers are working now.

### HOTSEAT | 84

## Your Guide to Managing

#### Survivor

A change at the top can spell trouble for a CIO's job security. Here's how to stay when your CEO goes.

*By David T. Gordon*

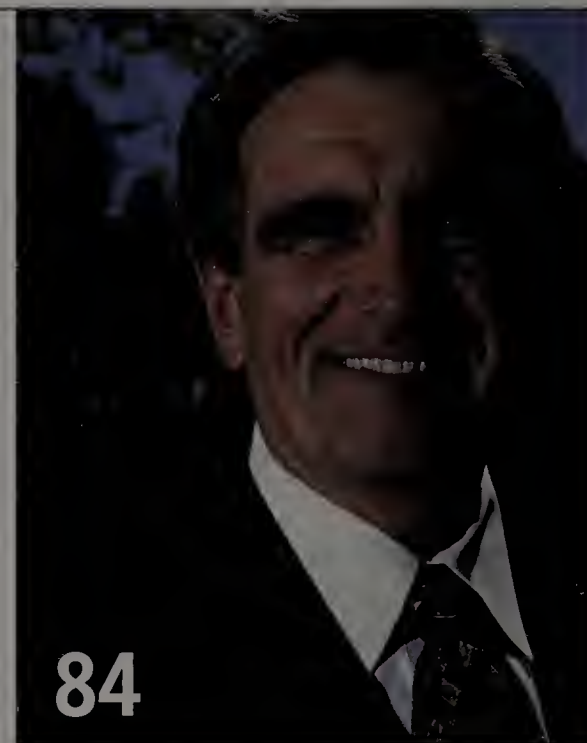
#### Management Reports | 88

Why CIOs can't talk with their CEO.

#### Leadership Agenda | 90

How to uncover your career destination.

*By Susan H. Cramm*



CIO-for-hire **Charlie Feld**, who's been through a few CEO changes in his career, advises CIOs not to be defensive or inflexible when a new CEO arrives.

### EMERGING TECHNOLOGY | 94

Winterthur Insurance's Internet-era experiments produce a low-cost application platform. *By Galen Gruman*

#### UNDER DEVELOPMENT | 100

Low-heat laptops: the end of the warm lap?

#### COMPANY TO WATCH | 102

GoldenGate looks to keep everyone's data in sync.

## In Every Issue

### FROM THE PUBLISHER

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U.S. software giants are increasingly delegating important software development and quality assurance work offshore. And that's a problem. *By Gary Beach*

#### INBOX | 16

Reader feedback

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#### EXECUTIVE SUMMARY | 108

Abstracts of all the feature stories found in this issue.



**"While the ideas behind the Real-Time Enterprise are sound—who wouldn't want to eliminate business process delays—the hype is getting ahead of the value."**

—Mohanbir Sawhney, Net Gains columnist, on the Next Big Thing Page 37



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As a global communications leader, Avaya wanted to accelerate market uptake of its cutting-edge solutions by providing superior product training to employees, customers and partners. **I am Avaya's idea, delivered.**

In one of the largest outsourcing engagements of its kind, Accenture is deploying web-based learning solutions in combination with traditional classroom training to transform Avaya University into a uniquely effective and cost-efficient global learning network. Now offering courses to more than 50,000 students, the university has cut time to proficiency by as much as 63% and supported the largest release of new products in Avaya's history—all at lower cost.



DSM is a global leader in life science products and specialty chemicals. In 2000, its CEO announced a major eBusiness program that set targets for taking its core business processes online. **I am DSM's idea, delivered.**

Accenture helped translate corporate vision into action and delivered a common eBusiness architecture for all 12 DSM Business Groups. A complex yet cost-effective undertaking that makes DSM a leader in the industry, the project is already reducing the need for working capital by 50%, cutting paperwork by up to 80% and giving DSM the ability to quickly integrate acquisitions by leveraging its eBusiness platform.



To drive growth in its more than 300 local operating companies, personal care and food products giant Unilever wanted to more effectively leverage management information in support of its Path to Growth commitments.

**I am Unilever's idea, delivered.** Accenture took a pragmatic approach in realizing Unilever's vision, drawing on innovative technologies to deliver a global data warehouse that integrates disparate data sources into a uniform tool for growth. Implemented on time and under budget, the system is now giving Unilever's managers around the world access to a single, consistent source of information.



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## WEB >connections

Interactive features from March 1 to March 14

### ASK THE SOURCE

## Outsourcing— Not

Farmers Group CIO Cecilia Claudio brought back in-house 90 percent of one division's original IT staff that had been let go for outsourcing (see **Bringing IT Back Home**, Page 54). Not an easy job. And counter to the prevailing wisdom about outsourcing, she saved money in the process. One key: Run in-house IT like an outsourcer. Claudio will be available to answer your questions for the next two weeks on successful reinsourcing. Go to Web Connections or [www.cio.com/ask/source](http://www.cio.com/ask/source).



Cecilia Claudio, CIO, Farmers Group

### TAKE THE QUIZ

## How Emotionally Intelligent Are You?

CIOs who are sensitive to others' needs are better, more effective managers (see **Are You the Strong, Sensitive Type?** Page 78). The online eight-question Emotional Intelligence quiz gives you instant feedback, as well as links to sources that can help you boost (or maintain) your score in the future.

For links to these pieces, go to the **WEB CONNECTIONS** box at [www.cio.com](http://www.cio.com).

### Peer Resources from CIO's Sister Publications

- You "get" the potential of Web services (see **Getting Ready for Web Services**, Page 94). But do you still find yourself having to explain what Web services is to the other Os? Send them to [www.darwinmag.com](http://www.darwinmag.com) to read **Learning Curve: What Is/Are Web Services?**
- Trying to keep up with the security issues surrounding the latest federal e-initiatives? (See **A More Perfect Union**, Page 44.) Check out the **Legislation and Policy Research Center** at [www.csoonline.com](http://www.csoonline.com), the online version of CSO magazine.

### Our Daily Web

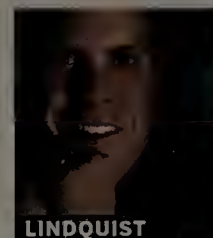
**MONDAY TechTact** Technology Editor Christopher Lindquist covers what's coming.

**TUESDAY Alarmed** Security experts Sarah D. Scalet and Scott Berinato give you something new to worry about.

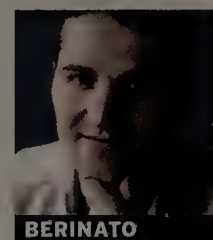
**WEDNESDAY Metrics** Web Writer Jon Surmacz makes sense of the numbers.

**THURSDAY Sound Off** Web Editorial Director Art Jahnke opines on ethical dilemmas.

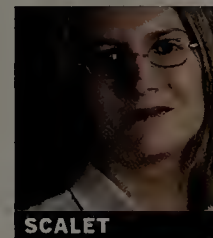
**FRIDAY The Big Picture** Charts and graphs worth a thousand words.



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### What's New on the Site

- Looking for a good book on leadership or e-business? Check out the newly revamped! **Reading Room** ([www.cio.com/books](http://www.cio.com/books)) for the latest book excerpts, author interviews and interactive sessions, as well as all of CIO's reviews.
- Need some career advice? These days, who doesn't? We've recently corralled a team of three career experts to answer your questions in the **Executive Career Counselor** section ([www.cio.com/counselor](http://www.cio.com/counselor)). Ask your own questions or read previous advice.





# HOW DOES THE HOCKEY HALL OF FAME PLAY TO WIN?



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# From the Publisher

*gbeach@cio.com*

## Offshore Costs



*Gary J. Beach*

**THE NEW ECONOMY** is creating a huge headache for the newly minted U.S. Department of Homeland Security.

The spending downturn has affected both users and manufacturers of information technology products. CIOs respond by cutting budgets and putting pressure on tech vendors to lower their profit margins. Vendors, in kind, respond by pulling out all the stops to lower costs. Often this means offshore manufacturing.

It's yesterday's news that the only thing "Dell" or "HP" about those vendors' machines is the logo glued on the computer casement. What is becoming news—and it should be a serious concern for Homeland Security Secretary Tom Ridge—is that U.S. software giants are following suit by increasingly delegating important software development and quality assurance work to offices in foreign countries.

It's one thing to assemble the component parts that go into a PC. Not much opportunity to change the product there. But software development is a horse of a different color. Foreign nationals who work as software engineers for Cisco, Intel, Microsoft and Oracle in Bangalore, India, personally build—or corrupt—the software products that make up the foundation of the global digital economy and infrastructure.

In this post-9/11 environment, it's tough for end user companies and technology manufacturers to strike a balance

between the security concerns and worker privacy rights, respectively. While Secretary Ridge can mandate strict privacy and security measures in Boston—if Congress goes along with it—what can he do about such policies in software development shops in Bangalore? Not much. And all it takes is one errant line of code written by a terrorist posing as a software engineer to create global chaos.

I am convinced that offshore software development is the soft underbelly of this nation's future technology infrastructure. True, offshore development offers CIOs and technology vendors a short-term gain by lowering costs, but it creates potential for long-term and catastrophic pain by making it easier for bad guys to get jobs building American software.

The answer? We need to dramatically improve our country's math and science curriculums.

If you're concerned about offshore software development, drop me a note.



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# InBox

Reader Feedback

## THE PRINTING PROCESS

Your articles are generally well-written and well-researched; however, "A Bullets List" [Trendlines, Dec. 15, 2002/Jan. 1, 2003, available at [www.cio.com/printlinks](http://www.cio.com/printlinks)] makes a serious error when it bases itself on the fallacy that human fingerprints should be "no different than ballistic fingerprints." Since our fingerprints—thankfully—don't wear out, it is reasonable to accept that a database of criminals' fingerprints can serve a definite purpose. Indeed, many crimes have been solved using such databases the world over. But a database filled with bullet fingerprints fulfills no purpose whatsoever, since all guns change their "fingerprint" every time a bullet is fired. They also wear out, can be tampered with easily and travel from one owner to the next, so that the question becomes, What would your database be useful for? It would prove the old truism—garbage in garbage out—but it would cost a lot of money and the public would not see any ROI.

Mike Hawkins • Infosec Manager • Stamford, Conn. • [mbustrip@yahoo.com](mailto:mbustrip@yahoo.com)



## REAL METRICS

Susannah Patton's Nov. 15, 2002, story "Web Metrics That Matter" [see [www.cio.com/printlinks](http://www.cio.com/printlinks)] does a credible job of describing the various ways Web publishers analyze customer behavior, but it simply rehashes old, first-generation Web-metric tools.

Technology has moved well beyond "net dollar per visitor, clickstream and average time spent on system" to where companies like ours can now provide tried-and-true sets of metrics that are well accepted in traditional business.

Internet publishers can now analyze their audiences via consumer profiles built in real-time. Then they can use the profile data to target customized content and marketing messages back to individual audience members.

Publishers armed with this kind of user detail can design far more effective (and better targeted) marketing messages, content and CRM programs.

Dave Morgan  
CEO  
Tacoda Systems  
New York City

## GO MOBILE

In reading Ben Worthen's Dec. 1, 2002, article "When Wireless Works" [see [www.cio.com/printlinks](http://www.cio.com/printlinks)], I couldn't help but be reminded of the medieval principle, Occam's Razor, which, with a few liberties, basically states that the simplest solution is always the best. In mobile enterprise technology, as in science, the simplest solution is indeed the best.

Enterprises have many choices when looking to deploy mobile data services. While middleware vendors, wireless ASPs and systems integrators are all potential options, it is imperative that we not overlook the simplest solution of them all—deploying data services via your mobile operator.

Mobile operators today are offering enterprise organizations secure, affordable, easy-to-use mobile data services. By signing up for data services through a mobile operator, enterprises are able to leverage their current IT infrastructure, avoid unnecessary hardware or software installation, adhere to the highest security principles, and allow employees to use their mobile device of choice. What's more, the services are future proof—they

inherently work across evolving networks, from 2.5G to 3G and beyond.

Mobilizing a workforce doesn't need to be complicated or expensive; Sprint PCS's Business Connection and Cingular's Xpress Mail Network Edition are both examples of services that allow an enterprise to deploy a department or an entire workforce for the lowest cost of ownership and in the shortest amount of time—bar none in the industry.

With today's cost-cutting and severely limited technology budgets, the simplicity of purchasing a wireless solution from mobile operators provides a welcome change. It makes mobile deployments doable.

Mark Biestman  
President and CEO  
Seven  
Redwood City, Calif.  
[mbiestman@seven.com](mailto:mbiestman@seven.com)

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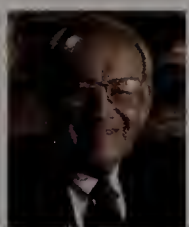
the **NEW** the **HOT** the **UNEXPECTED**

Edited by Lafe Low and Michael Goldberg

HEALTH-CARE I.T.

## A Modest Prescription to Remedy Health Care's Ills

WHEN DR. PAUL ELLWOOD invented the health maintenance organization in 1970,



Dr. Paul Ellwood

he wanted to improve care through competition and a focus on preventative medicine. Unfortunately, it didn't work out that way. Managers at the time used HMOs to cut costs. And in spite of those efforts, climbing health-care costs are a famous fact. In 1960, health care made up 5 percent of the gross domestic product. By 2000, it hit 13 percent, according to the government.

Now Ellwood, among the most important voices in American health care during the past three decades, believes there's only one way to fix the nation's health-care system: Embrace computers. "Computers are our best and only chance of getting around the problems we've got," says Ellwood,

who was a consultant to President Clinton during his failed attempt at massive reform in the '90s.

Late last year, Ellwood and his band of reformers known as The Jackson Hole Group convened for the first time in six years to take another stab at reform, this time with an IT bent. The timing—the economy is in recession and medical bills keep rising—was not happenstance.

Neither was the heavy IT focus. Ellwood wants to use IT where he sees others abusing it. He is troubled by a new generation of CRM-driven health-care policies that let policyholders set their level of coverage—in effect letting healthy people pay less and putting more of the cost burden on the sick. (For more on this, see "CIOs at the Heart of Health-Care Change," at [www.cio.com/printlinks](http://www.cio.com/printlinks).) That is, in effect, rationing, and Ellwood says it's the "dumbest idea around."



The whole idea of insurance is that you're supposed to pool the risk to help pay for the sick."

Instead, The Jackson Hole Group (which supports universal health care) now wants to use IT to create "personal health journals"—a voluntary system of electronic medical records that would contain an individual's entire medical history. The key is that the patient would control his records. Not the doctor or the hospital or the insurance provider.

Those journals would be standard, open and not cooptable by proprietary technology (for example, one hospital wouldn't force its patients to adopt that hospital's standard and henceforth be "locked in" to that hospital because of the format of the records). They would be Web-enabled and viewable from a doctor's handheld or an insurance company's office.

Ellwood envisions a new Institution for Medical Practice and Technology implementing the journals first through Veterans

*Continued on Page 22*

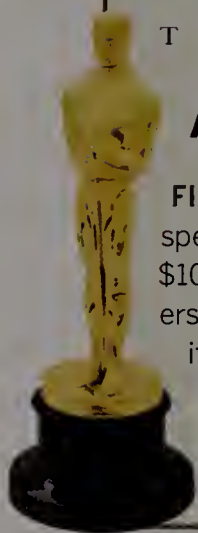
THE OSCARS

## A Low-Tech Tally

FILMMAKERS ARE FAMOUS for spending—*Gangs of New York* topped \$100 million—and for investing in computers that render amazing images. But when it comes to determining who the Oscars go to, it's a decidedly low-tech affair.

At PricewaterhouseCoopers, a team of auditors hand counts the

ballots from the 5,700 members of the Academy of Motion Pictures Arts and Sciences, and tallies the winners for each of the 25 categories. No IT to speak of. The ballots are secured the old-fashioned way—in a safe. "The count is confidential, and it remains that way," says Greg Garrison, a PWC partner. The process has remained virtually unchanged for nearly 70 years. On March 23, look for a tuxedoed Garrison in the always anticipated "Meet the Accountants" segment. —Daintry Duffy





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## O U T S O U R C I N G   D E A L S

# The End of the Billion-Dollar Babies?

**ARE WE SEEING** the end of the single vendor, multibillion-dollar, 10-year outsourcing deal that was popular in the 1990s? Well, those deals aren't extinct (see "Last of the Big Spenders?" right). But you won't find any CIO bragging about how his \$5 billion deal was a bust. And anecdotal evidence suggests those megadeals are now viewed with skepticism.

"We've had conversations with CIOs at companies that have had those big showcase deals, and they're less inclined to re-up with their existing partners as is," says Tom Weakland, managing partner of the global sourcing practice at DiamondCluster International, a management consultancy in Chicago. "We're still seeing big deals but not as many exclusive deals" because companies are opting to introduce multiple vendors into the mix. (For more on outsourcing trends, see "Bringing IT Back Home," Page 54.)

Smaller deals are making up a larger percentage of the outsourcing market, according to Forrester Research's December 2002 IT services study. Fifty-two percent of companies said they will spend less than \$10 million on outsourcing in 2003, according to the Cambridge, Mass.-based research company.

The problem with the megadeal? While the single vendor approach does have potential benefits (lower costs, convenience), it puts all the risk in one basket. And a single vendor isn't always

## Last of the Big Spenders?

These billion-dollar outsourcing deals announced at the end of 2002 came after a long lull in the market. Observers see smaller multivendor deals occurring more often in 2003.

| COMPANY             | OUTSOURCER          | DEAL                   |
|---------------------|---------------------|------------------------|
| Bank of America     | EDS                 | 10 year, \$4.5 billion |
| CIBC                | HP                  | 7 year, \$1.5 billion  |
| Deutsche Bank       | IBM Global Services | 10 year, \$2.5 billion |
| Dutch Bank ABN Amro | EDS                 | 5 year, \$1.3 billion  |
| J.P. Morgan Chase   | IBM Global Services | 7 year, \$5 billion    |

the best choice for every possible IT function.

Procter & Gamble, for example, decided not to go ahead with an \$8 billion business process outsourcing deal with EDS, deciding it would probably take a handful of vendors to manage the work.

"Companies are realizing that a one-size-fits-all approach to outsourcing doesn't work," says Laurence Bunin, CEO of Handshake Dynamics, a consultancy in New York City.

And a lot can change in a 10-year deal. Shorter terms sound more manageable to CIOs such as Cecilia Claudio of Farmers Group. "I don't think those global overarching types of deals are the best," Claudio says. "If I were to recommend doing that, I'd say do it over a shorter period of time. And understand exactly why you're doing it."

—Stephanie Overby

## M I D M A R K E T   C R M

## Microsoft Joins Another Fray

**STOCK MARKETS** dipped. Republicans conquered Congress. A lot has happened since last February, when Microsoft unveiled its plans to enter the CRM market. But the number-one software developer, which made its CRM package available on Jan. 21, through resellers and application-hosting services, isn't planning to compete against the likes of PeopleSoft and Siebel Systems. Instead, Redmond is aiming its first business software built on the .Net platform at the small to midsize market. Salesforce.com, SalesLogix and others are the likely rivals in that segment.

Microsoft has two things going for it, CRM analysts say. One—the field is wide open. Fewer than 5 percent of companies with 20 to 150 people use CRM, says Barton Goldenberg, president of ISM, a research company in Bethesda, Md. And two—these are Windows and Outlook e-mail users, says Paul Greenberg, president of The 56 Group, a consultancy in Manassas, Va. "They will gain market share very quickly and become a major player at every level of the market in a few years," Greenberg says.

## Health Care's Ills

*Continued from Page 20*

Administration hospitals.

There's more to Ellwood's plan than these patient journals, however. He wants to accelerate the development of clinical care apps, like physician order-entry for prescriptions or electronic film transactions, so that patients get better care and the resulting reduction in errors can lower malpractice claims.

Ellwood knows there are barriers to this latest plan—privacy being a big one. Huge up-front technical investments are another. But Ellwood also feels that a big barrier—doctors' complaints about data entry—is gone. "You can get data in quickly now, and it's routine and systematic. The discipline of IT systems will actually create disciplines and efficiencies in health care," he says.

Ellwood believes this plan can fare better than the HMO. He adds: "We have the power to make the health-care system more 'progressive,' instead of letting it remain stuck in its traditional guild-like ways."

—Scott Berinato

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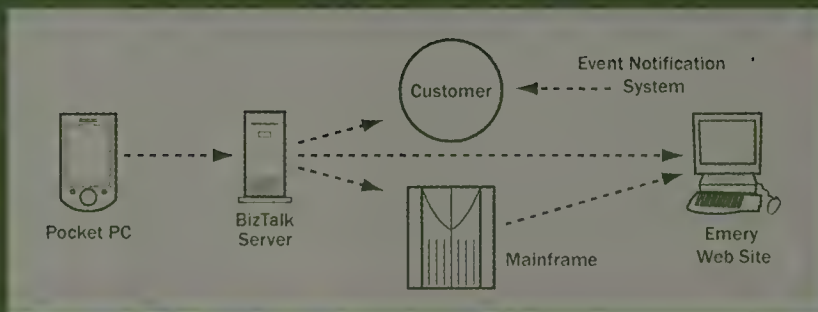




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# By the Numbers

By Lorraine Cosgrove Ware

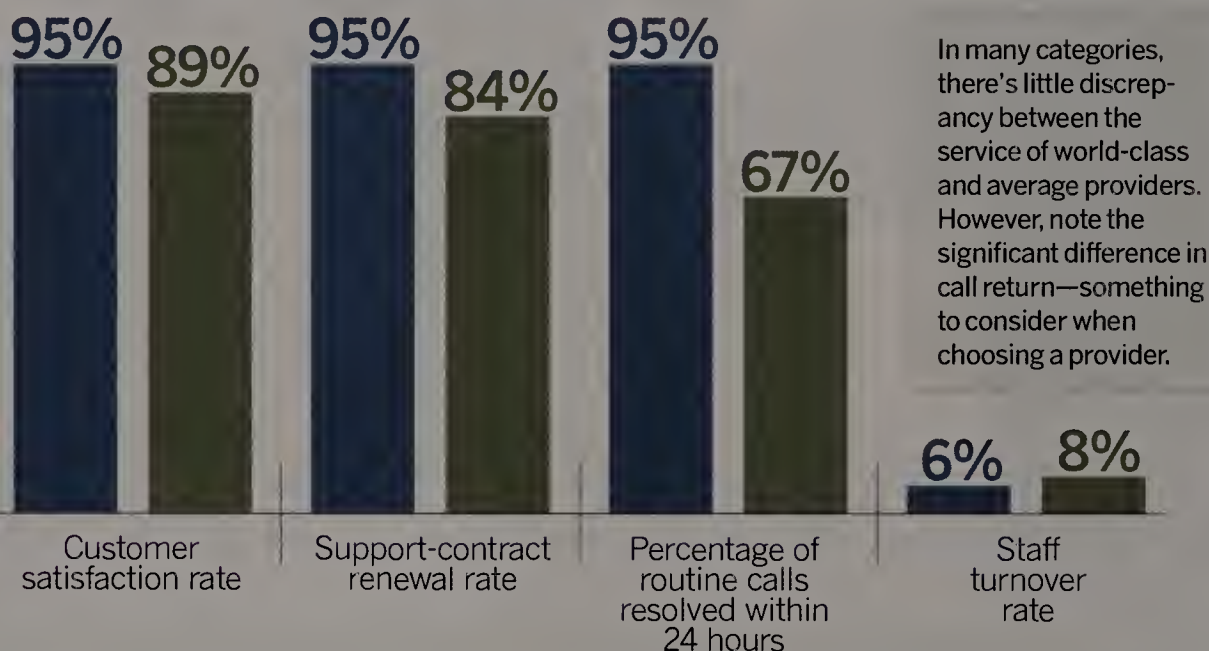
## Hold Vendors Accountable

It's true what they say about the squeaky wheel. To get the support you're paying for, you need to know what's possible, and then demand it.

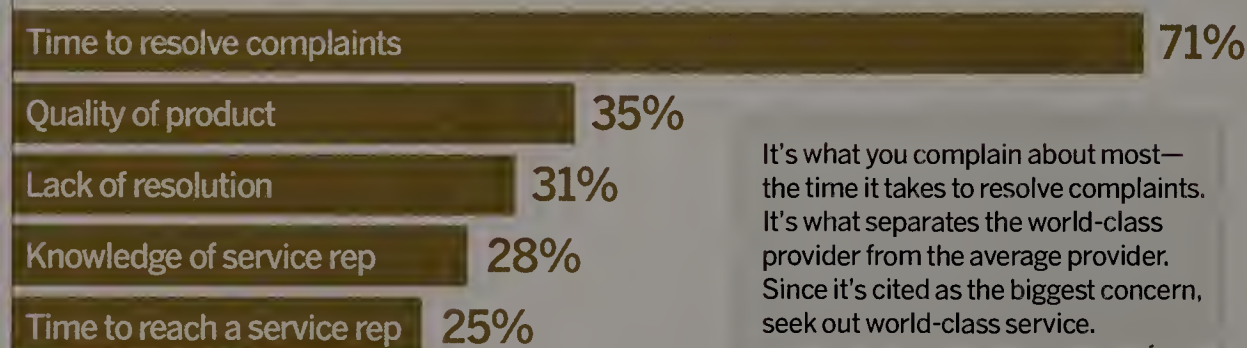
Every business says it offers world-class service, but what does that really mean? According to a recent study by the Service and Support Professionals Association (SSPA) of 150 IT support managers, world-class service includes four key elements: customer service, customer loyalty, service levels and people management.

**Customer loyalty:** the expression and action that defines the commitment of a customer to maintain an ongoing relationship with the service provider.  
**Service levels:** effective resolution of customer problems within a mutually agreed upon time frame.  
**People management:** effective management of support staff.

### World-class service organizations vs. Average service providers



### Customers just like you most frequently complain about:



## Best Practices

**Seek out vendors with high-quality support staff.** A support staff that has strong skill-set training will most likely have greater business knowledge and a better understanding of your business needs, and will respond and resolve your problem more quickly. Ask your service provider about the support staff's training and certifications, how quickly your case will be escalated and who'll be involved in the resolution process. A world-class service provider should have this documented.

**Demand to be heard.** Top-notch support providers conduct periodic customer satisfaction surveys based on recent transactions. World-class service providers also conduct surveys of senior-level executives and have representative advisory councils. CIOs should look for support providers that have a process documented for the customer to voice their opinions—both good and bad.

**Search for good customer relationship management practices.** The IT organization should hear from its support provider any time something interesting or relevant to that client occurs (for example, a patch is released). Tom Sweeny, SSPA research director, suggests that "communication with the client should occur frequently and well before you need money from them." World-class organizations proactively check in with clients when they haven't heard from them in a few months. "Technology makes it so easy to touch base with clients, there's no excuse not to," says Sweeny.

SOURCE: SEPTEMBER 2002 "SUPPORT INDUSTRY BENCHMARK STUDY," SERVICE AND SUPPORT PROFESSIONALS ASSOCIATION

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I. T. H I R I N G T R E N D S

# MBA Job Forecast: It's Cold Outside

**A SOBERING THOUGHT:** Of the 362 graduates in the class of 2002 at MIT's Sloan School of Management, about three-quarters—269—were still seeking jobs at graduation last spring. (Seven more started their own business, and another 11 were not looking for work for various reasons.)

So when students from the famed business school gathered on Jan. 16, for a high-tech, high-touch networking session at the suburban Boston offices of venture capitalists Atlas Ventures and Castile Ventures, they were aware it wasn't only the freezing temperature outside that was making this a chilly season.

Still, among the 50 or so students making connections, Christopher Lee donned his best economic outlook as well as his sport jacket. "I wouldn't use the word *optimistic*, but there are opportunities there," Lee says.

Like most first-year Sloan students, Lee, who wants to work for an enterprise software company, is looking for a summer

internship to complement his two-year MBA program and catapult his career. Second-year students, however, are job hunting. The 50 companies at the reception (part of the Tech Trek, a student-organized series of briefings that students use to scout job and internship opportunities) come from Boston area venture capitalists and computer industry vendors big (EMC and Cisco) and small (SpeechWorks, a voice-recognition developer, and Edocs, an e-billing software maker).

This kind of turnout buoyed the spirits of students like Justin Steinman. "If you're dreaming of working at Bose," Steinman says, "you can find the Bose exec and introduce yourself."

At the very least, the Tech Trek provides the students with a realistic view of the hiring climate they can expect once they graduate. So far, it's a dogsled race in slush: 80

percent of 375 members of Sloan's class of '03 are seeking jobs or internships. (Fourteen have won summer internships, and one has started a business. Leading internship companies: Citigroup, Lehman Brothers and Merrill Lynch.)

"This is a sobering experience for most students," says Phil Rossetti, senior partner at Boston-based corporate law firm Hale and Dorr, one of the Tech Trek sponsors. "That so many companies are participating in the Tech Trek says that there's light at the end of the tunnel. They are hiring, but it's very targeted." —Lafe Low



I. T. E D U C A T I O N

## A Tech Taj Mahal Takes New IT Focus

**THE INDIAN INSTITUTE OF TECHNOLOGY (IIT)** is the pinnacle of high-tech education for Indian teenagers interested in technology careers. High school students must pass rigorous tests before they are even allowed to take the IIT entrance exams, and a mere 2.5 percent of applicants are accepted (compare that with Harvard's seemingly lenient 11 percent). The school, the subject of a recent *60 Minutes* profile, is known for sending young engineers to make their way in the computer labs of Silicon Valley.

So with the school's stateside supporters celebrating its Golden Jubilee, it wasn't all that surprising to see Bill Gates serving as the celebrity star at a January event in Cupertino, Calif. The event's real news for IT professionals, though, was the unveiling of a new School of Information Technology to be built at IIT Delhi (one of the school's seven campuses).

Vinod Khosla, a Sun Microsystems cofounder who is general partner

at venture firm Kleiner, Perkins, Caufield & Byers, donated \$5 million to the school's construction, and he has high hopes for what the institution will mean for the future of IT management around the world.

"Management of IT is a complete disaster," Khosla says. "No matter what you buy, you spend far more owning it than buying it," whether it's CRM suites or PC hardware. To that end, he hopes the school will allow IIT students to address basic issues of IT management, implementation, adaptability and complexity. "We must look at doing things completely differently."

Who knows? India's legendary engineering school could become a breeding ground for future CIOs. —Christopher Lindquist



Sun cofounder Vinod Khosla



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# On the Move

By Meredith Levinson

## State of the States

**DURING THE PAST YEAR**, CIOs have cycled in and out of state IT departments faster than Lance Armstrong pedals downhill. Some of this turnover happened when newly elected governors took office and started appointing new cabinet members.



Colorado Gov. Bill Owens named **Leroy Williams** (left) as the state's new CIO. Williams previously served as CIO of Colorado's Department of Personnel and Administration. New Mexico Gov. Bill Richardson tapped **Moira**

**Gerety** to serve as the state's CIO. In Georgia last December, **Larry Singer** stepped down as CIO and executive director of the Georgia Technology Authority, a position he had held for two years. He is one of several of former Gov. Roy Barnes' appointees who resigned before newly elected Gov. Sonny Perdue took the reins.

Conversely, some of this revolving-door effect has nothing to do with election results and everything to do with state CIOs getting into trouble over conflicts of interest, cronyism and even fraud. Former Utah CIO **Phil Windley** resigned last December after months of controversy over contracting deals. According to Associated Press reports, the Utah Auditor General Office found favoritism in Windley's administration. The salaries of five employees—with whom Windley had worked previously at now-defunct Internet company Excite@home—averaged about \$12,000 more than the typical annual salary for those positions. Windley said he resigned because he had become “an impediment to implementing e-government.” Last January, former Utah Lt. Gov. **Val Oveson** (left) replaced Windley as CIO.



In Florida, Gov. Jeb Bush tapped **Kim Bahrami** (right) as state CIO last June. She had served as interim CIO since August 2001 when her predecessor, **Roy Cales**, resigned after an audit uncovered hundreds of thousands of dollars in questionable purchasing practices (see “Walk on the Wild Side,” at [www.cio.com/printlinks](http://www.cio.com/printlinks)) and after being charged with an unrelated fraud.



As Bahrami was taking office as Florida's CIO, controversy was spilling over in the other sunshine state. A California state audit revealed that then CIO **Elias Cortez** was about to waste millions of taxpayer dollars on a \$123 million, no-bid deal with Oracle to consolidate the state's

purchases of thousands of database licenses that only five of 127 state agencies wanted, according to the *San Jose Mercury News*. Cortez resigned from his post last June. Three months later, California Gov. Gray Davis named **Clark Kelso** as the new CIO.

In Arkansas, both the state CIO and chief information security officer, **Randall Bradford** and **Mike Miller**, respectively, resigned last June. Several days later, they were officially fired. Bradford and Miller had reported problems with the state's \$52 million information system to the press. The two men claim that Arkansas Gov. Mike Huckabee's office ordered them to block legislators and committees responsible for overseeing the system, and that they were fired for blowing the whistle on the system's cost. A spokesperson for Gov. Huckabee told the Associated Press that Bradford was fired for not accepting direction from the governor or his aides. Two months later, Gov. Huckabee named **Carolyn Osbourne** as the new CIO.

### PROFILE: STABILITY, AT LAST

**THERE'S BIG NEWS** in the private sector from **John Puckett** (right), former vice president and general manager of wireless and Internet technologies at Polaroid. Previously, Puckett also served as CIO and CTO for Toysmart.com and CIO of GTE Internet-working—companies marked by the black cloud of bankruptcy.



Puckett is finishing up his first 100 days with his new employer, DuPont. He joined the Wilmington, Del.-based chemical manufacturer this past January as CTO. He reports to DuPont CIO Bob Ridout and is responsible for identifying technologies that add value to the business and increase shareholder value.

Boasting \$24.7 billion in revenue, \$4.3 billion in profits, 79,000 employees worldwide and such recognizable brands as Lycra, Stainmaster and Teflon, the 200-year-old company is a far cry from Puckett's previous employers. However, he says his decision to join a corporate stalwart like DuPont (a position he found through a recruiter) was not influenced by his track record of joining financially unstable firms.

“If you asked me that when I left Toysmart for Polaroid, which was then a stable company, there would have been an ingredient of that. But at this point, absolutely not,” Puckett says. “I viewed the opportunity at DuPont as something that was a great match for my skills. The quality of the company, the way it views technology, its reputation in the industry and how it conducts itself played a role in the decision [to join].”

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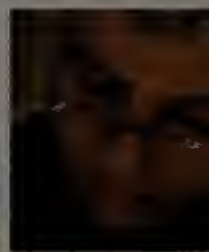
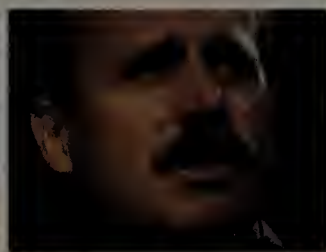
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## EXECUTIVE TRAVEL

# Luxury at 35,000 Feet

**THE COMMERCIAL AIRLINE INDUSTRY** may be ailing (see "The Incredible Lateness of Delta," Feb. 15, 2003), but competition for the traveling executive is taking off. For example, charter flights and the shared-ownership of business jets (known as fractional ownerships) are on the rise. And the passenger cabin—where technology-enabled amenities from companies such as B/E Aerospace of Winston-Salem, N.C., and DPI Labs of LaVerne, Calif., envelop the C-level traveler—is a key battleground. We found a couple of amenities worth looking for.

**The chair is the network:** CIOs can lie down and log on during flights with this first-class seat.



**The chair.** The ergonomically enhanced Lie-Flat POD (above) from B/E Aerospace can be enclosed in a privacy screen, allowing weary travelers to recline flat for sleeping; from a special armrest, a traveler can control his seat position and lighting, as well as audio, video and Internet connections. Find it on British Airways, Japan Airlines, Qantas and Taiwan's EVA Air.

**The in-flight network.** DPI Labs developed in-flight entertainment (IFE) systems for private aircraft that function as a peer-to-peer network in the sky, says Creighton Hart, an embedded systems engineer for DPI. The network acts as a cabin management system that relies on a distributed architecture (rather than embedded processors) to control climate, lighting, air pressure and much more.

For plane outfitters, this design means less wiring and better reliability. For passengers, a DPI-designed system means systems can be configured for individual preferences toward lighting, temperature, video and audio entertainment. DPI has developed IFE systems for planes as small as a Gulfstream V and as large as a Boeing 747. No word on whether office versions are available yet. —Lafe Low

## This Date in IT History

2



In **1998**, Apple Computer opts to stop producing its much-anticipated-but-plagued-from-the-start **Newton handheld computer**. Since its 1993 debut, the Newton has been criticized for its sluggish handwriting-recognition feature. Apple's abandonment of the Newton makes it now possible to say "Newton was hit by the falling apple, and Apple was hit by the failing Newton."

3



Father of the telephone **Alexander Graham Bell** is born in **1847** in Edinburgh, Scotland. Twenty-nine years and one week later in Boston, Bell commands, "Mr. Watson, come here, I want you" through a crude telephone receiver for the world's first telephone call. Bell files his telephone patent application just hours before competitor Elisha Gray files his. Three weeks later, Bell introduces a functional telephone using some ideas Gray proposed in his Notice of Invention.

4

**AT&T** says it will replace one-third of its telephone operators in **1992** with an automated operator system. Some 6,000 long-distance operators hang up their phones and give way to AT&T's voice-recognition software. Callers must now press "0" to speak with a real person.

6



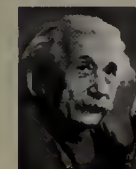
The **Michelangelo computer virus** awakes in **1992**. Hysteria spreads when it is reported that the data deletion virus lies dormant in millions of computers but will activate on March 6, the birthday of the great Renaissance artist. Advice given to users: "If you don't have a virus-checker, don't turn on your computer that day." Between 10,000 and 20,000 computers are affected, which is far less than the forecasted 5 million.

8

A Minnesota jury rules IBM is not responsible for **repetitive stress injuries** suffered by keyboard users in **1995**. The sore-wristed accusers claim that IBM should have provided warning labels with its hazardous keypads. Apple had settled on an identical suit only nine days prior.

14

**Microsoft's initial public offering** opens on the stock market in **1986**. The asking price of the IPO is \$21. A paltry \$2,100 invested in 100 Microsoft shares that morning yields a \$700 profit by day's end. If untouched until 2003, that initial investment would be worth \$1.5 million.



**Albert Einstein** is born on this day in **1879**. Einstein's groundbreaking theories changed the scope of science and his complex mind is still studied today—literally. A piece of Einstein's brain is on display this month at the Seoul National Science Museum in South Korea.

16

**The Secret Service** is ruled in **1993** to have violated the Electronics Communications Privacy Act when it seized computer records and e-mail from a computer games company in 1990.

26

**David Packard**, computer hardware czar and one-time deputy defense secretary for Richard Nixon, dies in **1996**. Packard met Bill Hewlett at Stanford University in 1930, and by 1939, the two were making electronic equipment together in Packard's one-car garage in Palo Alto, Calif. Hewlett-Packard was incorporated in 1947. The Palo Alto garage is now a historical landmark for the "birthplace of Silicon Valley." —Daniel J. Horgan

SOURCES: THE HISTORY CHANNEL, CNET NEWS, TELECOMWRITING.COM, VIRTUALOLOGY, TIME MAGAZINE, VMYTHS.COM, THE RISKS DIGEST, THOMAS HYLAND, KOREA NOW, MONTEREY BAY AQUARIUM RESEARCH INSTITUTE





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# Net Gains

Creating Value Through IT

## Real-Time Reality Check

The Real-Time Enterprise is the next hyped thing.  
Don't get swept away.

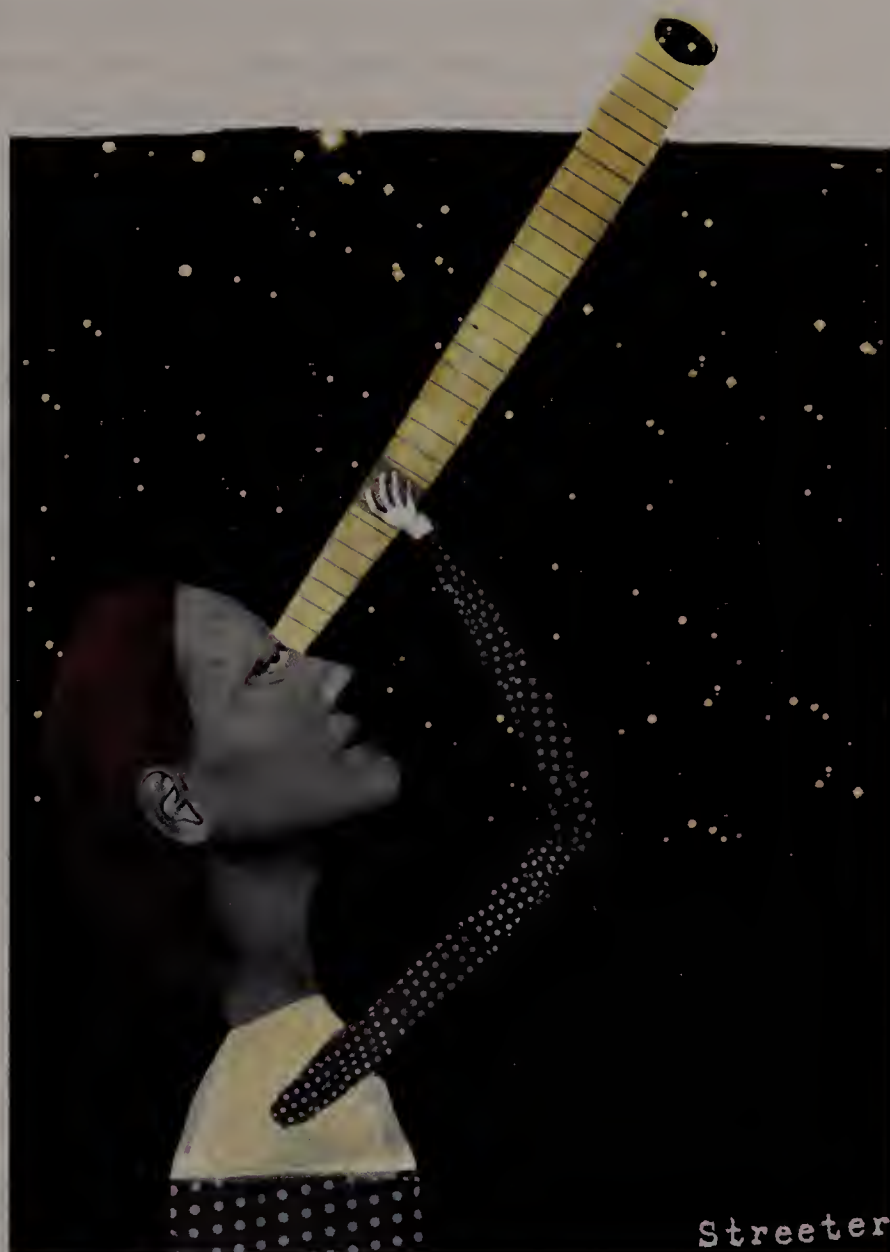
BY MOHANBIR SAWHNEY

**HERE WE GO AGAIN.** The hype-meisters have discovered the Next Big Thing. It is called the Real-Time Enterprise (RTE).

Here's exhibit A, from Gartner. Gartner defines the Real-Time Enterprise as an enterprise that "competes by using up-to-date information to progressively remove delays to the management and execution of its critical business processes." In a recent report, Gartner opines that in all likelihood, more than 20 percent of Global 2000 enterprise CIOs will cite the RTE as one of their top-five investment areas by year's end.

Gartner has plenty of company on the RTE bandwagon. A Google search in January turned up 14,100 hits. Vendors such as Asera, PeopleSoft and Tibco Software are staking their claims as "enablers" and "creators" of the RTE. Barton Goldenberg, a CRM consultant, declares that the RTE is "a fundamental paradigm shift in the way companies conduct business."

Really? Is the RTE the greatest thing since sliced bread, or have the vendors and IT consultants, desperate to find something new to sell, created yet another three-letter acronym that claims to take CIOs to the promised land? While the ideas behind the RTE are sound—after all, what company doesn't



want to eliminate delays in management and execution of its business processes—the hype is getting way ahead of its value.

### Separating Myth from Reality

What exactly is the vision of the Real-Time Enterprise? The value proposition of the RTE is rooted in the observation that time delays in business processes are the bane of productivity and competitiveness. By harnessing Internet-based technologies to radically reduce the elapsed time in business processes, the RTE can "sense" and "respond" almost instantaneously to any event that affects its business. Commonly cited examples of RTE-like phenomena are Cisco's ability to close its books daily, Wal-Mart's continuous ordering and replenishment, and Dell's rapid order fulfillment process.

It's a compelling vision, but here are a few myths and misconceptions to keep in mind:



**1. It's not new.** The notion that enterprises need to become more agile and productive is as old as business itself, while the idea of using elapsed time as a competitive weapon has been in vogue for a couple of decades.

In an influential 1988 article, George Stalk wrote about Time-Based Competition, an operational strategy that focuses on compressing total throughput time in an organization by changing the processes and structures used to design, manufacture and deliver products. In the 1980s, Japanese companies were using Just-in-Time management, a philosophy that seeks to eliminate all waste in operations to achieve speedy production while using minimal inventories. And the concept of radical reduction in elapsed time

### Just because information is available in real-time does not mean that an enterprise can act instantaneously on it.

of business processes sounds like Business Process Reengineering (BPR), which required "fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in cost, quality, service and speed."

**2. It's not yet real.** A wise man once said, "The future ain't where it used to be." Don't count on the RTE becoming a reality soon. Enterprises will slowly chip away at inefficiencies in their systems and business processes by incrementally replacing legacy systems, redesigning workflows and layering on newer Internet-based technologies. In reality, the RTE will evolve far more slowly than IT vendors and consultants might hope. Capital spending constraints, organizational inertia, immature technologies and delays in agreeing upon XML standards will jointly conspire to slow down the evolution of the RTE.

**3. It's not only about the enterprise.** No critical business process begins and ends within the four walls of the enterprise. The real-time enterprise cannot become real until the enterprise's suppliers, partners and customers are all connected, and information flows from the suppliers at one end of the extended enterprise to customers at the other. To exploit the true potential of the RTE, you need buy-in from every upstream and downstream entity you do business with. This is a challenging task that involves creating trust, aligning goals, creating incentives for adoption, and educating partners, customers and suppliers.

**4. It's not about speed.** Reducing delays and speeding up business processes is not an end in itself—it is merely a means for creating additional value for customers. A business case for an RTE initiative needs to be grounded in the *value of reducing delays*, not merely in terms of time saved. True, time is money. But the exchange rate between time and money should be deter-

mined based on how customers, partners and suppliers value the savings. Further, speed comes at a cost. The value of speeding up a business process should be weighed against the cost of speeding up the process so that you aren't speeding up at any cost.

**5. It's not about technology.** Just because information is available in real-time does not mean that an enterprise can act instantaneously on it. Latencies and delays have far more to do with business processes that are poorly designed, people who are too busy or incentives that are misaligned. The vision of the RTE cannot be achieved without also addressing inefficiencies and design flaws in business processes and organizational structure. Ignoring the human issues is an invitation to disaster, as the experience with BPR showed.

**6. It's not right for everybody.** Vendors will often sell you on the Next Big Thing with the justification that everyone else is doing it. The RTE is no exception. While every enterprise can benefit from becoming more agile, agility is only one of the ways to win. Consider the retailing business. Wal-Mart and the Spanish apparel retailer Zara may want to become RTEs because they win on speed and agility. But Nordstrom relies on customer service, and Kohl's uses store layouts and merchandise selection as its competitive weapons. Nordstrom and Kohl's should focus their IT investments on technologies that improve customer service and merchandise selection. After all, your business strategy should drive your IT strategy, and not the other way around.

### Less Than Great Expectations

A major reason the RTE is a hot topic right now is that new technologies make it more feasible to connect systems, applications and business processes. These developments, which include XML, Web services, data warehousing, middleware and component-oriented enterprise architectures, allow business processes to become speedier and more agile. Agility and responsiveness in turn result in lower operating costs, more targeted offerings and superior customer service.

As with any new technological development, the truth about the RTE is somewhat less than what meets the eye. With that said, I believe that the vision of gradual evolution toward the RTE is laudable, as long as CIOs are pragmatic about the pace of the evolution and remember that technology by itself cannot transform enterprises.

The RTE is just another evolutionary step in the application of technology to improve business productivity. Take your time hopping on this train. It isn't leaving the station just yet. **CIO**

Is the Real-Time Enterprise for real? Write to us at [netgains@cio.com](mailto:netgains@cio.com). Mohanbir Sawhney is the McCormick Tribune Professor of Technology at Northwestern University's Kellogg School of Management. He can be reached at [mohans@kellogg.northwestern.edu](mailto:mohans@kellogg.northwestern.edu).





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# Peer to Peer

Field-Tested Ideas from CIOs for CIOs

## Straddling the Great Divide

The CIO of a Chicago trading company—who knew nothing about the business when he started—tells us how he won over the suits. And his technological know-how had little to do with it.

BY DIETER MARLOVICS

**IN MY OPINION**, many CIOs fall short of filling the requirements for the position. There is a misconception shared—unfortunately, not only by businesspeople but by many CIOs as well—that this is a job for a techie. That's simply not true. A successful CIO is a businessperson with a good understanding of technology. Without an intimate understanding of both the business and technological sides of the equation, a CIO cannot be effective. Most IT executives don't start with this broad portfolio of skills, but they can be learned. I did.

I was the founder and executive vice president of a startup online food-delivery marketplace (that was going nowhere fast) when I saw an enormous opportunity in the nascent field of electronic futures trading. With electronic trading, stock markets were doubling their volumes every week. But in 1999, financial and commodity futures exchanges, along with their associated brokerage and clearing firms, were way behind the times. I pitched the CEO of the Gelber Group, a futures brokerage and clearing firm, on an idea to create a powerful electronic trading division. I suggested he hire me as CIO and head of electronic trading. The CEO agreed.



I joined knowing that the Gelber Group had a reputation for talented brokers, good service and complete lack of technology. E-mail at the Gelber Group consisted of a handful of AOL accounts for various employees. Everything external was accessed via a dial-up connection. Management was proud of a corporate network that consisted of a handful of computers linked together that had no purpose beyond being there to say, Hey look, we have a network.

I arrived knowing as little about the futures industry as the executives knew about technology.

My first challenge was to change my fellow managers' perception of technology. I also needed to gain the respect of a group of executives who had known and worked with each other for years. It's not surprising that there was skepticism about the new division and about me.

I started out lean. I treated the new division as I did my

ILLUSTRATION BY JAMES O'BRIEN

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cash-strapped startup. I designed and implemented a business-wide information system, and I didn't sleep very much. To make matters worse, Gelber was very fragmented, and many employees had no idea what the company's overall focus was. To break down those silos, I began writing weekly e-mails to the entire firm explaining what was going on in my division (with an optimistic spin, of course). My CEO was fired up from the first e-mail and encouraged me to keep going. So, I

system reliability has to be perfect; and setup time for a customer has to be nonexistent. Those may be unrealistic metrics to live up to, but my goal was to come as close to perfection as possible. My staff and I also had to be able to speak the traders' lingo. Once I learned it just from being around them, I was able to teach the support staff how to communicate with traders over the phone as if they were brokers taking orders. Today, about two and a half years after the new division was launched, the electronic futures trading business at Gelber has increased more than 300 percent.

## To master the essential business skills, you must understand human nature and pay attention to everyone's point of view.

continued to document our struggles, transforming what could have been an embarrassing failure into a soap opera that was enjoyed by many staff members as well as the management team. It finally got to the point where even the skeptics were cheering me on. This excitement and team unity was a powerful counterweight to the morale-crippling long hours, occasional dead ends and inevitable growing pains.

When I was done, the firm had e-mail, massive Internet bandwidth and top-notch trading systems with access to all the major global exchanges. We went live in the second quarter of 2000. Business was slow for the first eight months or so, but I had convinced my vendors into touting Gelber as a technologically gifted customer. I reasoned that if the vendors were broadcasting respect for Gelber, our customer base would listen and take note. It worked. In 2001, during the course of six months, we went from having 10 customers in Chicago to more than 75 in three different countries.

### Learning the Biz

Even more important was my crash course in the futures industry. During strategy sessions in the first year, I spent 75 percent of my time listening. I also sat with customers while they were trading to get a feel for what they were looking for in a service provider. The time I spent in front of a trading terminal to understand how the markets moved and why traders did what they did was priceless. Not only did I get a feel for what the traders saw and how I could make it more intuitive, but some of them were more than willing to let me spend time in their offices and truly see what issues they dealt with every day. I just sat and absorbed their problems and started creating managerial solutions based on their complaints. Our customers are demanding, high-volume traders. Execution has to be delay-free; response time from the support desk has to be instant;

was born. Our customers don't have to hire IT professionals; they don't have to invest in any infrastructure, and they don't have to worry about the cost of maintaining the technology. Their only cost would be variable and transaction-based. The ASP product, which launched in mid-2002, is already profitable, although still in the beginning stages.

As CIO, I am in the middle of it all. In such a technology-heavy business, where downtime can cost the firm and our customers millions of dollars, the CIO needs to be a business leader, a good manager, a talented technologist and an above-average salesperson. The CIO needs to have a strong say about sales strategy, since he understands the capabilities of the technology better than anyone else in the firm. I used this understanding to push through the ASP opportunity, which might have gone unnoticed by the rest of the management team. If a CIO does not have the ability to handle all those areas, then he should be called an IT manager—not a CIO.

So how do you get there? You probably already have the technological skills. The hard part is mastering the business skills, and that demands an understanding of human nature. Business is about only one thing, and that is money. A CIO who understands how money is made is ahead of the game. As is an executive who listens to everyone's point of view. All of this takes practice. I still have a lot to learn. Like everything, business skills are gleaned from experience, from observing wiser heads and making your own mistakes. But if I can do it, so can you. **CIO**

Dieter Marlovics is CIO of the Gelber Group, a futures brokerage and clearing firm in Chicago. He can be reached at [dmarlovics@gelbergroup.com](mailto:dmarlovics@gelbergroup.com). Got any ideas you'd like to share with your peers? Let Senior Editor Alison Bass know at [abass@cio.com](mailto:abass@cio.com).





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# A More Perfect Union

The E-Government Act of 2002: The dollars, the players, the hurdles, the

On Dec. 17, 2002, President Bush signed the E-Government Act into law. The signing was muffled amidst the drumbeat of war talk with Iraq, and with scant controversy behind its bipartisan passage, it was little more than a blip on the radar screen of the nation's media. Yet by the simple action of signing the act, the president had taken a giant step toward launching the federal government into the information age.

E-government is designed to make it easier for citizens and businesses to access government information and services by encouraging interagency IT initiatives that, while improving customer service, also consolidate redundant systems, decrease paperwork, increase productivity and save money. As Mark Forman, associate director for IT and e-government at the

#### Reader ROI

- ▶ The E-Government Act's major provisions
- ▶ Why privacy concerns remain a huge stumbling block
- ▶ How e-government is reform by another name



**PRESIDENT BUSH**  
wants to introduce  
corporate efficiencies  
into government.

Deputy CIO **IRA HOBBS**  
of the Agriculture  
Department must  
collaborate with peers to  
make e-government work.

Sen. **JOE LIEBERMAN**  
of Connecticut penned  
the E-Government Act  
of 2002.

Rep. **TOM DAVIS** of Virginia  
wants to give Congress more  
security oversight.

# nion

uture BY TODD DATZ



Office of Management and Budget, told a gathering last year of the Open Group—a standards body—e-government will enable “an order of magnitude improvement in the federal government’s value to the citizen; with decisions in minutes or hours, not weeks or months.” Ultimately, it’s about making government citizen-centric so that you can go to websites to get information about unemployment benefits, comment on proposed clean air rules or apply for an import license. You save time. And the government gets more for its IT dollars.

That’s no small matter. The federal government’s proposed IT budget for the 2004 fiscal year is a whopping \$59 billion. Yet that money has traditionally been appropriated and spent on an agency-by-agency basis, with little regard to how a system might fit into an overall federal architecture and with little focus on using IT to improve citizen services.

**M**

ONEY AND BUDGETS aside, the E-Government Act is a logical extension of President Bush’s management agenda, which cites e-government as one of the five key cornerstones of his efforts to run government more like a business. “The

idea behind this law is for the federal government to take full advantage of the Internet and other information technologies to improve its efficiency and to secure its electronic information,” said Sen. Joe Lieberman (D-Conn.), author of the act, in a statement released last December.

The new legislation aims to further the inroads Forman and his staff at the OMB have been making; they have been using IT to help improve government efficiency and make services more responsive to citizens. The OMB’s 25 various e-government initiatives are a prime example (see “E-Government in Process,” Page 48). One of the projects, the Department of Labor’s Govbenefits.gov site, aims to help citizens locate

and determine their eligibility for benefits and services. Patrick Pizzella, CIO at the DoL, is justifiably proud of the new site. “In 30 to 60 days, we’ll have [close to] 300 government benefit programs on the site.... It saves [citizens] a lot of time, and it’s available around the clock,” he says.

The act builds on the work already being done by the OMB and the federal CIO Council, and it pumps the power of law into the government’s IT fuel tank. To establish accountability, it has created a new office within the OMB devoted to e-government strategy and implementation. It establishes a separate, \$345 million E-Government Fund for interagency projects, requires basic standards for federal websites and privacy impact assessments for new systems, and calls for improved information security measures. (For major provisions of the act, see “E-Government Act of 2002 Highlights,” opposite page.)

“The bill is probably the most extensive piece of legislation to date on e-government,” says Dave McClure, who worked on the legislation. McClure is vice president for e-government at The Council for Excellence in Government in Washington, D.C., a group that works to improve the government’s performance. For their part, federal CIOs say the new law and its E-Government Fund finally gives them the legal and financial backing needed to make e-government happen. “The fund will support projects that try to find innovative ways to make it easier for the public to conduct business with the federal government,” says Woody Hall, CIO at the Customs Service. Rosita Parks, CIO at the Federal Emergency Management Agency, also is a fan of the fund. “Having had managing partner responsibility for two e-gov initiatives with broad application since last August, and understanding how difficult it has been to garner resources for both initiatives, I believe that one of the most beneficial elements of the act is that it authorizes e-gov funds beyond the



\$100 million originally targeted,” says Parks.

Although Congress and the administration are clearly paving the way to creating a 24/7 government, there are a number of hurdles ahead for the 60 or so federal CIOs who make up the CIO Council. Reformers are starting to chip away at the traditional stovepiped structure of the federal government—spurred by the integration of 22 agencies into the new Department of Homeland Security—yet the fact remains that an agency, not cross-agency, perspective is the norm. Until that changes, a functional framework for e-government will be nothing more than a tease and an empty promise. In addition, privacy and security issues will remain paramount as citizen information is increasingly gathered and exchanged among numerous agencies’ systems. And the \$345 million that the act authorized for the E-Government Fund over four years is subject to the legislative whims of Congress. That became clear in January when Senate appropriators slashed \$40 million from the \$45 million that was earmarked for the 2003 fiscal year.

While the e-gov act promises major benefits in terms of service and efficiency, achieving true e-government won’t happen until the players involved overcome some significant challenges.

## THE ACT’S GUIDING PRINCIPLES

### ■ Make it easier for citizens to interact with government.

Attempting to find out which agencies are responsible for regulating nursing homes or protecting local rivers or regulating the



The idea behind this law is for the federal government to take full advantage of the Internet and other information technologies to improve its efficiency and to secure its electronic information.”

—Sen. Joe Lieberman

amount of animal byproducts in the bratwurst you just consumed can be a frustrating trip through a byzantine collection of 22,000 agency websites. The act calls for improving the federal government’s portal, Firstgov.gov, so that citizens will have access to better organized information in fewer clicks, regardless of agency. According to McClure, the act mandates uniform access

to the government’s functional services—paying taxes, applying for loans or getting disaster assistance, for example. “The goal is to do it simpler and faster, without navigating government bureaucracy,” McClure says.

Another provision calls for e-rule making that allows citizens to comment on proposed regulations online. “It’s a very democratizing provision,” says Kevin Landy, a counsel on

Lieberman’s staff on the Senate Governmental Affairs Committee who worked on the e-government legislation. In January, the Environmental Protection Agency launched a new website ([www.regulations.gov](http://www.regulations.gov)) that gives citizens and businesses a one-stop portal to submit their opinions on government regulations from all departments. Previously, the public comment process was difficult to

use; for example, citizens needed to know the agency responsible for a specific rule and often had to submit the comment in writing. “E-rule making will allow citizens to participate actively by enabling them to be involved in federal rule making on their own terms at a location and time of their choice,” said EPA Deputy Administrator Linda Fisher in remarks delivered at the time of the site’s official launch. “This initiative will help assure the public that they have a role in making regulatory decisions, and that it can be done in a more timely and efficient manner.”

Another significant plus: The OMB estimates that creating a single system for rule making will save \$94 million.

■ **Increase agency-to-agency cooperation.**

Since the birth of the nation more than two centuries ago, the federal government has grown up around an agency-centric structure. But

## E-Government Act of 2002 Highlights

From funding to security and staffing, the E-Government Act covers a lot of ground

| INITIATIVE                      | HOW IT WORKS                                                                                                                                            |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Office of Electronic Government | Creates new office within Office of Management and Budget, headed by presidential-appointed administrator                                               |
| E-Government Fund               | Calls for \$345 million over four years to fund interagency e-gov projects, subject to congressional appropriators                                      |
| Privacy                         | Requires privacy impact assessments for new IT systems                                                                                                  |
| Security                        | Makes the Federal Information Security Management Act law                                                                                               |
| E-Rule making                   | Gives citizens the opportunity to comment on proposed federal rules online                                                                              |
| Internet Guidelines             | Calls for basic standards for agency websites                                                                                                           |
| Technology Procurement          | Allows state and local governments to purchase IT using federal supply schedules                                                                        |
| Share-in-Savings                | Awards contracts in which the government shares with vendors any savings generated by improving efficiencies                                            |
| Workforce Development           | Includes training opportunities for federal IT workers and a public-private exchange program that loans IT workers to the private sector and vice versa |
| GIS Standards                   | Develops common protocols for geographic information systems                                                                                            |
| Judicial Information            | Requires federal courts to put information online, including docket information and written opinions                                                    |



today's government managers realize that for e-government to succeed, cross-agency partnerships are critical, whether it's the Department of Agriculture working with the Department of the Interior on geospatial mapping, or the Office of Personnel Management working with agencies to consolidate payroll systems. "We need to make choices based on citizens, as opposed to the specific department we come from," says Ira Hobbs, deputy CIO in the Department of Agriculture. To develop security standards, create website guidelines or make any other provisions of the act succeed, government CIOs will need to continue formulating common strategies.

Commenced in late 2001, the OMB's Quicksilver initiatives have already been actively breaking down barriers as agencies have worked side by side developing e-government projects. And the OMB's IT team, led by Forman, has also been working with government CIOs on a number of other IT initiatives, including the development of a federal architecture. The act provides "additional momentum for what we've been doing in terms of using IT to improve the value and delivery of government services," says Doug Bourgeois, CIO of the U.S. Patent and Trademark Office.

Jim Flyzik, who recently left government after serving in the Department of Homeland Security and as CIO at the Treasury Department, strongly advocates looking at government from a functional, not a stovepiped, perspective. And he thinks the act, as well as DHS, can do just that. "The evolution of the Internet and tearing down of lines of demarcation across entities is part of that evolution [toward a more functional view of government]. It allows a physical restructuring and better services," says Flyzik, who cofounded a Washington, D.C.-based government consulting firm, Guerra, Kiviat & Flyzik, last December.

**■ Raise the profile of government IT leaders by creating a new Office of Electronic Government and writing the federal CIO Council into law.**

The new office will be part of the OMB and led by a presidential-appointed administrator. That person will also head the federal CIO Council, an interagency group of CIOs and deputy CIOs. Those two provisions legislate two groups completely devoted to improving governmentwide management of IT. Flyzik, who was vice chairman of the council, says he'd been pushing to make the council law for some time. "We constantly tried to position the CIO Council to be a strategic force in setting the agenda for the administration," Flyzik says, adding that, by making it law, the council gains a lot more emphasis and authority.

The act sets out specific responsibilities for the new administrator, including capital planning and investment control for IT, the development of enterprise architectures, ensuring dialogue between the federal, state and local sectors, and overseeing the distribution of the E-Government Fund. A logical choice to head the new office is Forman, the government's top IT official.

**■ Strengthen privacy protections by requiring privacy impact assessments for new systems.**

Congress and the administration understand that Americans are justifiably concerned about privacy in their digital interactions. The provision calls for assessments any time personal information is collected on 10 or more people. The assessments must address what information is to be collected and why, how it will be used and secured, with whom it will be shared, and requires notice of how consent is to be obtained from individuals. "By requiring agencies to go through the process of answering those questions, I think we move a long way toward protecting the privacy of the American public," says Rep. Jim Turner (D-Texas), who introduced the legislation in the House.

McClure says that the importance of the provision is that assessments are now law. "In the past, there was guidance from OMB but nothing specifically in the law," he says. "That's a strengthening of privacy protections." Another provision requires agencies to provide privacy notices outlining their policies on their websites.

**■ Improve information security.**

In 2000, Congress passed the Government Information Security Reform Act (GISRA), which required agencies to report on the security of their IT systems and build security into their business cases when making budget requests. Last year, Rep. Tom Davis (R-Va.), a key supporter of the E-Government Act in the House, introduced legislation to strengthen GISRA, which expired last November. That bill became the Federal Information Security Management Act (FISMA), which calls for security standards,

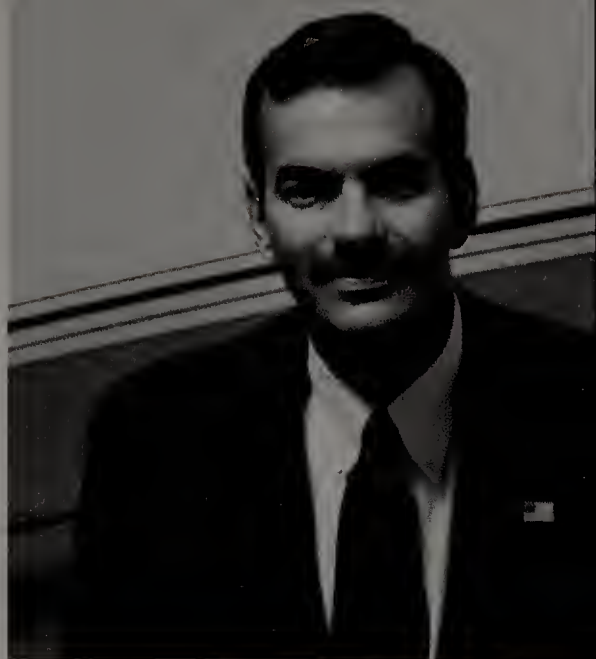
## E-Government in Process

To understand the challenges ahead for implementors of the E-Government Act, look no further than the hits and misses of the government's 25 e-government initiatives

In July 2001, the White House Office of Management and Budget launched an e-government task force. Its purpose was to create an action plan for implementing President Bush's Expanding E-Government initiative, the primary goals of which were to make it easier for citizens to interact with the federal government and to improve government efficiency and responsiveness to citizens.

The task force identified a number of performance problems, particularly due to overlapping and redundant agency processes. One example: A community trying to garner an economic development grant could potentially file more than 1,000 forms at more than 250 federal bureaus.





If Mark Forman, currently associate director for IT and e-gov at the OMB, became the federal CIO, it would elevate IT to a higher level.

annual independent audits and gives Congress more oversight over agency security matters. "Many have described it as GISRA with teeth," says Shannon Kellogg, vice president of information security policy and programs at the Arlington, Va.-based Information Technology Association of America, an industry trade group. FISMA became law in the E-Government Act.

Agriculture CIO Hobbs is enthusiastic about the security mandate. "We clearly need to continue improving our cybersecu-

rity posture across government. Having it [legislated] is good for all of us. It keeps our feet in the fire in the area where we need to spend time and resources," he says. Kentucky CIO Aldona Valicenti thinks it's one of the best things in the act, particularly because it makes it easier for states to interact securely with federal agencies. "You can imagine—I deal with Justice, Treasury, the EPA, [Health and Human Services]. If everyone has a different set of standards and a state wants to standardize on something

else, we're just nowhere," she says. "The greater amount of coordination on the federal side is positive for states."

Through many of its provisions, the E-Government Act gets the federal government out of the starting blocks, but managers and CIOs are going to be running 10-minute miles for a pretty long time. After all, one can't expect a single piece of legislation to quickly transform Washington's lumbering bureaucracy into a lean online machine.

PHOTO BY RON HOLTZ

In an attempt to improve customer service, the task force narrowed down an initial list of more than 350 e-government opportunities to 23 projects (two were added later); its prioritization efforts were dubbed the Quicksilver Process. The final group of projects, approved by the president's Management Council in October 2001, was chosen based on providing the most value to citizens, improving agency efficiency and deploying within 18 to 24 months.

The projects fall into five categories: government to citizen, government to business, government to government, internal efficiency and effectiveness, and cross-

cutting (see "Some OMB Quicksilver Initiatives," below). A \$5 million fund was established for the 2002 fiscal year to support implementation.

Last year, Sen. Joe Lieberman (D-Conn.), then the chairman of the Senate Governmental Affairs Committee and author of the E-Government Act, asked the General Accounting Office to review the completeness of the information used for choosing and overseeing the projects. Its report, released last Dec. 19, drew some unwanted publicity to the initiatives. The GAO found that only nine of the business cases used to support the initiatives took customer needs into account,

even though customer value was one of the OMB's primary goals. Only eight of the business cases addressed collaboration among agencies.

The GAO also looked at whether the OMB had adequate data to monitor the progress of the projects. "While some was clearly there, other pieces were missing," says Linda Koontz, director of information management issues at the GAO. The report cited a lack of accurate performance, schedule and cost information. A six-month follow-up with project managers late last year found that funding plans had changed more than 30 percent for half of the initiatives.

-T.D.

## Some OMB Quicksilver Initiatives

### GOVERNMENT TO CITIZEN

IRS Free e-Filing  
[www.irs.gov](http://www.irs.gov)

Department of Treasury

**WHAT IT DOES** Offers free online tax-filing to reduce costs to taxpayers

**PROGRESS REPORT** Site launched January 2003

### GOVERNMENT TO BUSINESS

One-Stop Business Compliance  
[www.businesslaw.gov](http://www.businesslaw.gov)

Small Business Administration

**WHAT IT DOES** Creates portal site where small businesses can access legal and regulatory information

**PROGRESS REPORT** Site launched December 2002

### GOVERNMENT TO GOVERNMENT

Disaster Management  
[www.disasterhelp.gov](http://www.disasterhelp.gov)

Federal Emergency Management Agency  
**WHAT IT DOES** Enhances disaster management across agencies

**PROGRESS REPORT** Pilot site launched November 2002



## IMPLEMENTING E-GOVERNMENT

### ■ There is no federal CIO.

It's been seven years since passage of the Clinger-Cohen Act, which required federal agencies to appoint CIOs. That act was a giant step in getting agencies to acknowledge the importance of IT to their mission. But, in the minds of many, a large hole exists at the apex of the federal government's IT management structure, a hole that should be filled by someone with the federal CIO title. During a congressional committee hearing on the e-government legislation, Valicenti, testifying for the National Association of Chief Information Officers, urged the committee to create the position. "We wanted to provide a powerful position so that the federal government would adhere to standards and put more of their services online," she says. The sponsors of the bill in Congress, including Sen. Lieberman and Rep. Turner, agreed, and the initial legislation called for the creation of a CIO position within the OMB that would require Senate confirmation.

But ultimately, the Bush administration nixed the proposal. "Any administration probably has a natural tendency to oppose the creation of additional positions that require Senate confirmation. That's particularly true in an environment when the Senate is in control of one party [as it was at the time] and the administration in control of the other," Turner opines. "Secondly, there is a natural turf battle any time you're

trying to elevate a position within the administration because OMB always has the belief that the director of OMB should be the one in charge of all management and budget issues, which in their mind, includes IT." Though Forman holds many of the responsibilities of the CIO position, his profile would likely be raised if he became the government's CIO. A person holding that title statutorially might have an easier time consolidating IT management powers into one position and would be in a stronger position to elevate IT to a higher level, helping to ensure that technology strategy is part and parcel of the federal government's management strategy.

### ■ The structure of the federal government makes successful e-government difficult.

As has been noted, the government's stovepiped structure has been institutionalized for more than two centuries. Even if cross-agency cooperation increases, the realities of the autonomous structure will make the process slow. Funding is one example. E-government requires that agencies offer services to citizens based on a functional perspective, "yet we program money on an

agency perspective," says McClure; that is, agencies develop their own budget. He says the same holds true for performance outcomes. "Congress is trying to instill a performance-based approach to government, but it's been an agency focus, not a functional focus."

Governance is another whole ball of e-wax. "E-government sort of blows up traditional organizational structures, processes and authority, and erases organizational lines pretty fast," McClure notes. "Trying to agree on governance models on authority, control and responsibility will have to be worked out."

"Bureaucrats guard their autonomy very carefully," says Darrell West, director of the Taubman Center for Public Policy at Brown University in Providence, R.I., "and e-government forces them to work together in ways they haven't in the past."

### ■ Agencies have a lot of work to do when it comes to security.

The good news is that agencies are prioritizing information security more than ever, and the E-Government Act will reinforce that momentum. The less-than-good news



# Rep. Tom Davis last year introduced legislation that would give government information security reforms some teeth.

## A Nation of End Users

Citizens are developing a taste for e-government. According to a Pew Internet & American Life Project Survey, in 2000, **47 percent** of Internet users had sought information from local, state or federal government websites. By 2002, the percentage had grown to **62 percent**, which translates into 71 million Americans.

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is that some agencies are beginning their ascent to the security summit somewhere around sea level or worse. The latest Horn computer security report cards of federal agencies, announced by Rep. Stephen Horn (R-Calif.) last November, gave F's to 14 of 24 agencies. (The Social Security Administration earned the highest grade, a B-) "I think the federal government still has a ways to go to get its house in order," says ITAA's Kellogg.

The challenge is even more acute for government agencies because citizens set a higher security bar for government than they do for the private sector, according to McClure. "If a government entity was hacked and credit card numbers [were stolen], public trust in government would suffer tremendously," he says. And, just as in the private sector, hacking government systems is a relatively common occurrence. "It's been a serious problem," says McClure, who previously worked as director of IT management issues at the General Accounting Office.

#### ■ Privacy concerns remain a lightning-rod issue.

E-government, by its very definition, means more data is collected and shared among agencies, and that raises the level of concern among privacy advocates. The Privacy Act of 1974, which put procedural safeguards in place to protect citizens' data, has held up surprisingly well for its age, but there are exceptions to that act that have increased over time. A major one is the "routine use" exception, which allows agencies to share information on individuals for the routine business of government. (For example, the Department of Education can share student loan information with the Treasury Department.) The danger is that routine use could increase as e-government expands, resulting in more personal information in the hands of agencies without the knowledge of individuals. "[The exception] is overused today already," says Ari Schwartz, associate direc-



## The E-Gov Act is a logical extension of President Bush's political agenda: Run government like a business.

tor of the Center for Democracy and Technology in Washington, D.C. "In the e-gov world, the concern becomes more acute because the whole purpose is for agencies to share information when needed."

Schwartz goes on to say that privacy protections have been weakened in the Bush administration, noting the failed Operation Tips (which encouraged citizens to report suspicious activity), new domestic surveillance rules passed last year that allow the FBI more liberty to gather information, and 2001's USA Patriot Act (which also allows the government more powers of surveillance). "Law enforcement should be able to do its job and share information in a reasonable way as long as its not invading privacy. But there needs to be oversight. [The country has] a history of the misuse of information," he says.

Of course, many of those developments have been a direct result of the events of 9/11. The tricky part for Americans is balancing the need for better information to prevent future terrorist attacks against the danger of losing their civil liberties.

#### ■ Citizens still lack access to government information.

Does the act turn the country into an e-democracy overnight? Absolutely not. The

digital divide isn't going away. There's no public catalog of all the government information that exists online. Agencies aren't required to post online who they do business with. "Why is it the public can't come through Firstgov.gov and obtain information about who's doing business with government?" says Gary Bass, executive director of OMB Watch in Washington, D.C., a government accountability watchdog group. "I should be able to know if General Electric is doing business with the government and at the same time see if GE is violating any regulatory or legal requirements imposed upon it," Switching gears from businesses to citizens, he adds, "I should be able to see how safe my drinking water is and [find] data that tells me the quality of the water. That's the information the public is interested in."

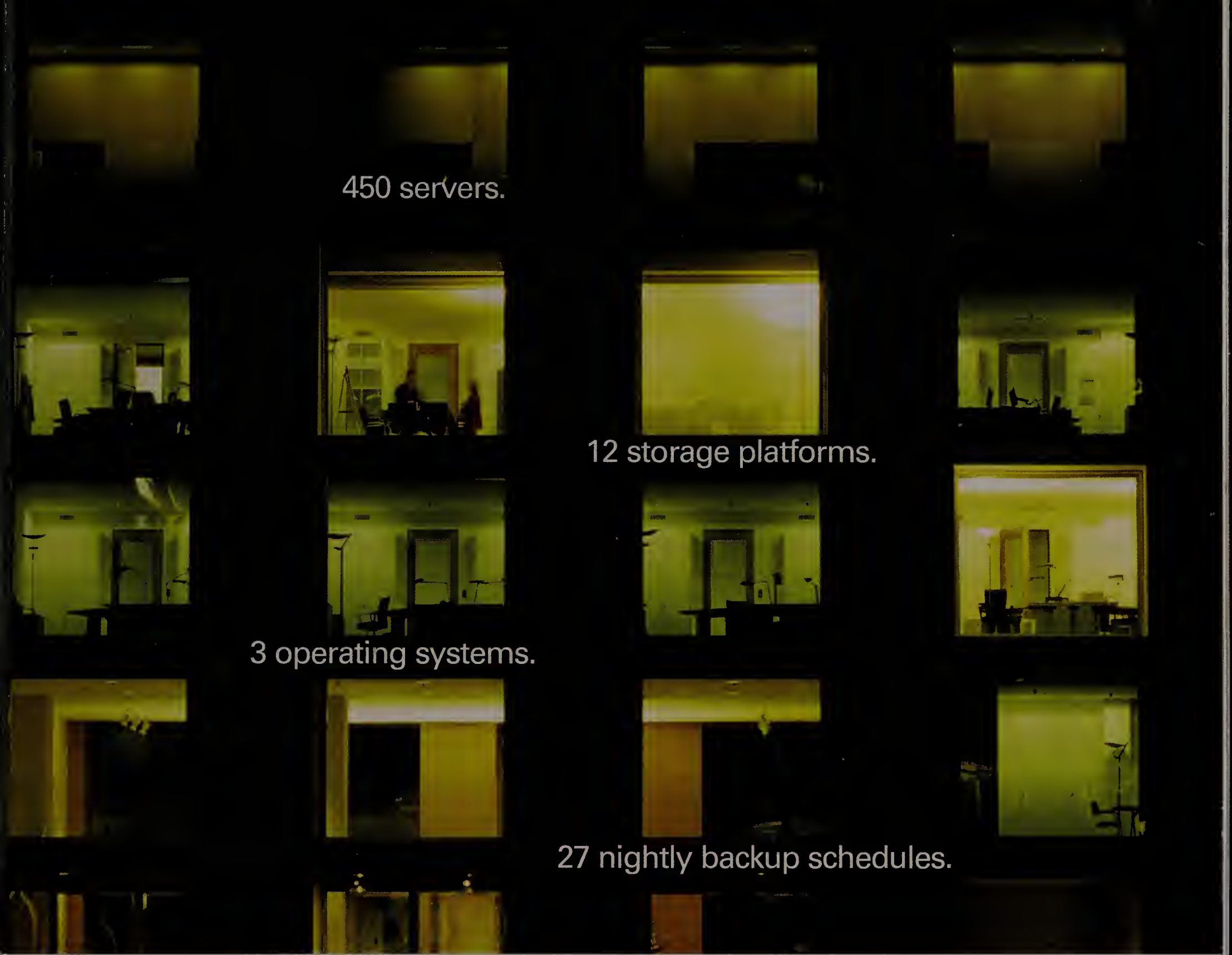
By virtue of the E-Government Act, the Bush administration and Congress have admirably put the pedal to the metal in their quest to make government operate more efficiently and cost-effectively, and to make government services more accessible and responsive to citizens. The act's bipartisan support in both houses of Congress clearly demonstrates that our elected officials recognize the importance of using IT to improve government. But transforming government won't happen overnight; it will be a long and slow process, akin to watching a sapling grow to maturity. The E-Government Act injects the necessary fertilizer, but its roots will need plenty of time to take hold. **CIO**

Senior Editor Todd Datz covers the public sector for CIO and can be reached at [tdatz@cio.com](mailto:tdatz@cio.com).

### peer resources

Trying to keep up with the security issues surrounding the latest federal e-initiatives? Check out the **LEGISLATION & POLICY RESEARCH CENTER** at [www.csoonline.com/legislation](http://www.csoonline.com/legislation), the Web version of CSO magazine, the resource for chief security officers.





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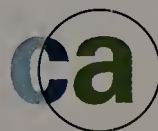
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Faced with a tight economy, CIOs are scrutinizing everything—including outsourcing. A number of them have taken back the keys to their shops, saving lots of cash. Here's how you can do it too.

BY STEPHANIE OVERBY

# BRINGING IT BACK HOME

**Cecilia Claudio is an IT outsourcing veteran.**

With 31 years of IT experience, she was one of the architects behind the 1994 landmark \$3.2 billion outsourcing deal between Xerox and EDS. As one of the first megadeals in the world of IT outsourcing, it infected countless CIOs with outsourcing fever. Back then, Claudio says, there were "real reasons why Xerox needed to do that"—the most important being the need to control IT costs on a global scale.

Nine years later, having watched numerous peers sign mega-outsourcing deals that have turned into major disappointments, she is wary about farming out IT. "I've never been a major proponent of outsourcing," says Claudio. "Sometimes people jump into it without really understanding what it means and why they're doing it. Then two, three years into it, they're very disappointed and they don't know how to get out of it."

**Reader ROI**

- Why outsourcing is not always the best answer
- How to reinsource a deal that's not working
- How reinsourcing can result in cost savings



**"I've never  
been a major  
proponent of  
outsourcing."**

—Cecilia Claudio,  
senior vice president and  
CIO of Farmers Group



**"We saw  
insourcing as  
a strategic  
opportunity  
for us."**

—Ellen Barry, CIO, Metropolitan  
Pier and Exposition Authority



**"It was better to  
reinsource because  
the functions  
involved such  
close interaction  
with customers."**

—Jerry Gross, executive vice president  
and CIO of Washington Mutual



## Outsourcing

It's no secret that IT outsourcing has a high failure rate. A whopping 78 percent of executives who have outsourced an IT function have had to terminate that agreement early, according to a November 2002 study from DiamondCluster International, a Chicago management consultancy. The top reasons for CIO dissatisfaction: poor service, a change in strategic direction and costs.

"IT outsourcing has been around long enough now that we are starting to see the second phase of it—CIOs are renegotiating

terms, contracts are expiring. Some deals just aren't working out at all," says Michael Murphy, who has been doing and undoing outsourcing deals for the past decade as a partner in the technology group at the Los Angeles offices of law firm Shaw Pittman.

But rather than renegotiate disappointing deals or contract with other vendors, CIOs are finding that if they want something done right—or at a lower cost or in a more strategic fashion—they've got to do it themselves. "Reinsourcing is becoming more common,"

says Rudolf Hirschheim, the Tenneco/Chase International professor of information systems at the University of Houston, who is conducting a study of the trend. "Many companies are finding that outsourcing simply doesn't provide the cost savings they had hoped for. Or they find themselves burdened by the contract, which doesn't allow them the flexibility they need."

The profiles below show how three CIOs brought outsourced work back into the fold—and how reinsourcing saved money.



Cecilia Claudio

### FARMERS GROUP

**REVENUE:** \$11.5 billion

**EMPLOYEES:** 19,000

**CONTRACT:** A 10-year, \$150 million IT outsourcing deal with Integrated Systems Solutions (now IBM Global Services) for mainframe IT support, application development and maintenance

**PROBLEM:** A back-loaded payment structure limited cost savings

**SOLUTION:** Terminated deal early and brought work in-house

**RESULT:** \$6 million in annual savings

## Walk Like an Outsourcer

After ending an outsourcing deal early, Farmers Group learns the key to successful reinsourcing: running its IT shop like an outsourcer would

**A FEW YEARS AFTER LEAVING XEROX,** Cecilia Claudio got burned by a big-name outsourcer. When she took over as CIO of Anthem Blue Cross and Blue Shield in 1996, she inherited a five-year, \$30 million data center deal with Unisys. Claudio was dissatisfied with service levels and increasing costs, so she got out of the contract and rebid the work, ultimately going with Affiliated Computer Services.

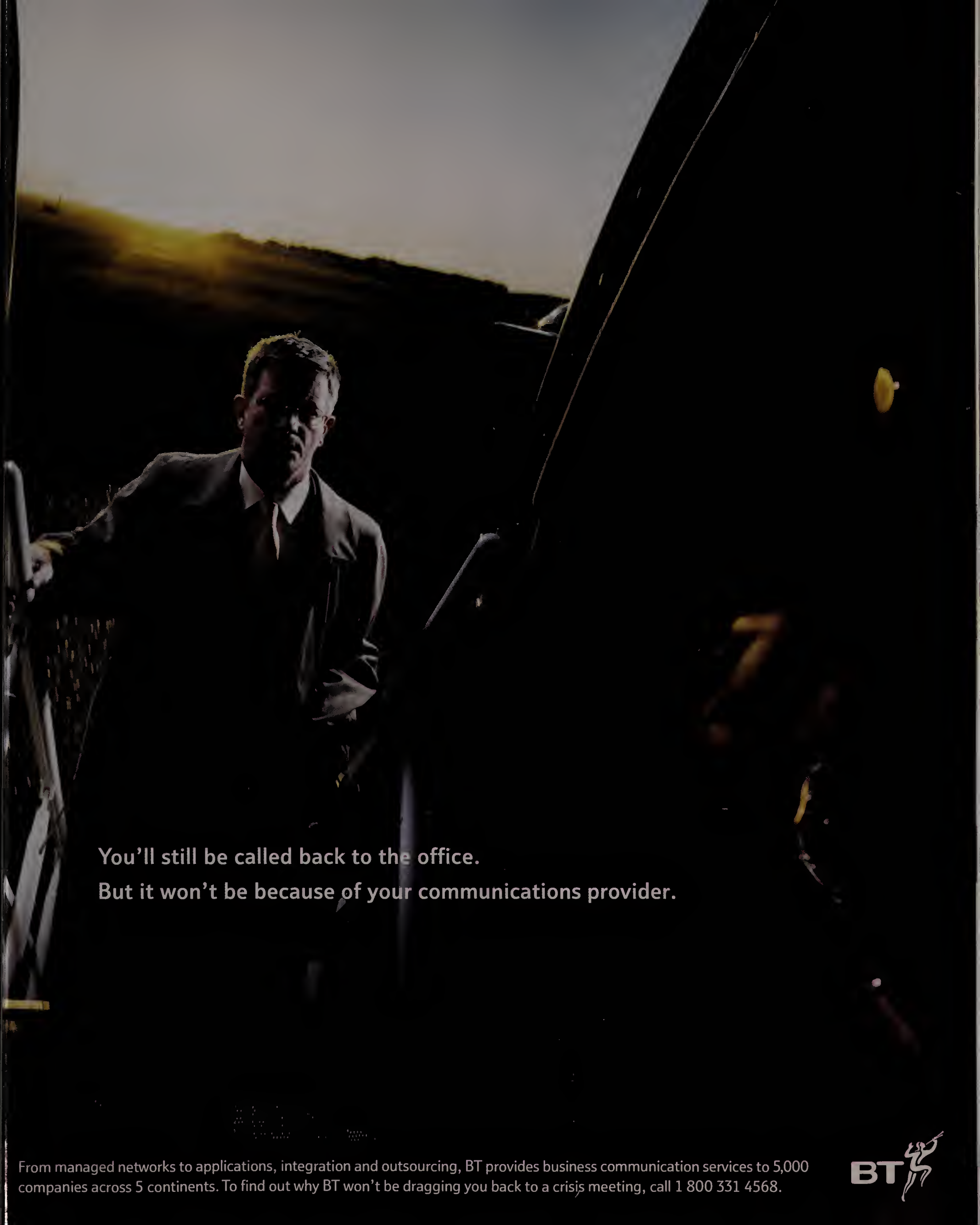
Since then, Claudio has proved that she knows not only how to get out of a bad situation but also how to bring outsourced IT back in. As senior vice president and CIO of Farmers Group, which she joined in 1998, Claudio did just that after the company acquired Foremost Insurance for \$812 million in 2000. The Caledonia, Mich.-based provider of insurance for mobile homes and RVs was outsourcing all of its mainframe IT support, application development and maintenance. The company was eight years into a 10-year, \$150 million arrangement with Integrated Systems Solutions (a division of IBM that eventually became the core of IBM Global Services). Foremost Insurance had originally outsourced the work for financial reasons but, according to Claudio, savings never materialized. In fact, costs were escalating. "They didn't have a strong contract that allowed the customer to reap the benefits of total cost of ownership going down over time," explains Claudio.

So after Farmers brought Foremost into the fold, Claudio and her team chose to bring all the work in-house rather than offer it to another outsourcer. By doing that, she believed she would have better control over the work being done and the costs involved.

Although Farmers would have to pay \$4 million in cancellation fees and early termination penalties, Claudio's financial analysis showed that the company could recoup those initial costs within a year and then begin to save money.

First she had to break the news to the service provider, which was difficult. "I pride myself on having excellent relationships with partners and vendors, and I don't do things lightly," explains Claudio. "It's hard to go to a big partner and say, 'This is no longer working for us. We're not seeing the benefits.'"

Then there was the process of bringing outsourced staff aboard at Farmers. Those employees effectively had been boomeranged. Originally Foremost employees, they lost their job when the IT work was outsourced. Then they had to be convinced to join up with the outsourcer. Now they were being asked to come back as Farmers employees. Claudio knew that having their knowledge of the company and its systems would be critical, particularly during the transition. So she had to "make it appealing not only on a professional level but on

A man in a dark suit and tie stands on the deck of a ship, leaning against a railing. He is looking back over his right shoulder towards the camera. The background shows the ship's hull and a sunset sky with a bright orange glow. The overall mood is dramatic and professional.

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## Outsourcing

an emotional level.” Although she could not offer them the variety of tasks and access to new technologies that the outsourcer provided, she could promise stable positions at a company that cared for its employees. Ultimately she was able to bring back 90 percent of the original IT staff.

The entire reinsourcing process took six months and was completed in September 2000. Claudio says the move paid off.

“Within the first year, we began saving about \$6 million a year.”

The key has been running in-house IT like an outsourcer. “[We’re] a very lean organization capable of achieving the best value for our money,” Claudio explains. In fact, some say Claudio’s IT shop is even more efficient than that of most outsourcers, with information technology costs coming in at 1.9 percent of revenue. William N. Pieroni,

general manager of IBM’s global insurance industry group, can attest to that fact: “Farmers’ IT spending levels are less than half that of the major competitors, and that is nothing less than incredible given the scale and scope of the enterprise.”

“It all starts with pride of ownership,” Claudio says. “I believe I can do as good a job if not better in the major aspects of running an IT shop than an outsourcer.”

## The Vendor Strikes Back

When the Metropolitan Pier and Exposition Authority chose not to renew its IT outsourcing contract, it had to fight a political battle

**THINGS DIDN’T GO SMOOTHLY FOR ELLEN BARRY** when she reinsourced network and Internet services. As the CIO of the Metropolitan Pier and Exposition Authority (MPEA) in Chicago, she was up against an outsourcer that fought dirty.

In 2000, Barry joined the MPEA, which owns and manages the McCormick Place convention complex and popular tourist attraction Navy Pier. At the time, the municipal agency was in the second year of a three-year revenue-sharing arrangement with RedSky Technologies for all show-floor network services. The relationship started in 1995, and then the MPEA signed a deal with RedSky in January 1998. At the outset, the arrangement made sense: The MPEA didn’t see technical services as its business, the capabilities of its IS department were limited, and its clients weren’t interested in Internet and network-related services.

In the late ’90s, however, demand for such offerings at McCormick Place—the largest convention center in the country—exploded. With those services outsourced, the MPEA couldn’t effectively respond to new demands from customers for things like private virtual LANs, firewall implementations and high-speed bandwidth. It became evident to Barry that perhaps offering such value-added IT services to its customers *should* be part of the MPEA’s core competencies. “Some people might say that your business isn’t support. But if it touches your customers, it *is* your business,” says Ivy Meadors, CEO of High Tech High Touch Solutions, a Woodinville, Wash.-based IT consultancy.

RedSky, which had no plans to expand the outsourcing side of its business, invested little in network hardware and thus had to design a network for each show, leaving the MPEA to build and tear down the physical network each time a show rolled into the 2.2 million square-foot center. Barry knew there had to be a better way. So in September 2000, she began exploring what other centers were doing and evaluating the pros and cons of insourcing those IT services. What she learned convinced her to bring Internet and network services under the MPEA roof. With a year left on the contract, insourcing was worth pursuing.

However, desperate to keep MPEA’s business, RedSky did everything it could to hold on. The vendor went behind Barry’s back and approached members of the board, other MPEA IT vendors and even Mayor Richard M. Daley’s office to argue that the agency couldn’t handle the job. (RedSky declined to comment for this story.) One board member, the vendors and a fellow IT executive in the mayor’s office tipped Barry off to the bad-mouthing. “Some doubters at the MPEA didn’t trust the IS organization to manage this type of delivery,” Barry recalls. “It’s that age-old belief that government employees can’t handle that kind of service work.”

So Barry went about proving that it could be done—and that it would be a boon for the MPEA. “We had to make sure that whatever we designed was flawless,” Barry explains.



Ellen Barry

### METROPOLITAN PIER AND EXPOSITION AUTHORITY

**REVENUE:** \$332.2 million

**EMPLOYEES:** Approximately 650

**CONTRACT:** A three-year revenue-sharing deal with RedSky Technologies for network and Internet services

**PROBLEM:** Inefficiency, inflexibility and limited functionality

**SOLUTION:** Did not renew contract with outsourcer and brought work in-house

**RESULT:** Providing a greater variety of revenue-generating network and Internet services to customers





## **CURSOR:**

CIO who discovers that his expensive new integration system needs yet another integration system.

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## Outsourcing

With the help of Cisco Systems, the networking vendor and partner on the project, she drew up plans for the transition. Although a basic fiber infrastructure already connected the three buildings that make up McCormick Place, the MPEA would need to add 400 miles of fiber runs to create a permanent and redundant network backbone. She also saw an opportunity to connect the facilities at Navy Pier as well as the Hyatt Regency McCormick Place (owned by the MPEA and operated by Hyatt). She made the presentation to the board, who told her to pursue the insourcing alternative.

In September 2001, the MPEA prepared a proof of concept for insourcing network services at one of the biggest shows McCormick

Place hosts, the Radiological Society of North America, which descends upon the Windy City every Thanksgiving. During the six-day gathering two months later, MPEA IT staff connected 40 rooms on a private network and provided uninterrupted Internet access. "It gave the organization the confidence that we could do what we needed to do," Barry says. "And do it well."

The MPEA spent \$1.5 million to build the infrastructure, and Barry informed RedSky that the MPEA would be going through a 90-day transition period to bring network services in-house permanently. And during that transition, she told RedSky, the MPEA would provide all Internet and network services using the Cisco backbone. The out-

sourcer's network would serve as backup.

Barry eventually hired four RedSky employees and brought over two from the MPEA's IT staff. And since late March 2002, that team has been delivering all Internet and network services to the show floor. In addition, the MPEA now provides high-speed Internet access to all 800 hotel rooms at the Hyatt McCormick Place, has installed 802.11 wireless cafes to customers who request them and has implemented a connection to Internet2.

"We saw insourcing as a strategic opportunity for us," Barry says. Expanding IT services, she believes, will attract more customers to the MPEA and ultimately lead to a stronger local economy.

## When the Mission Changes, IT Does Too

For Washington Mutual, a passion for customers prompted the bank to reinsource all of its IT functions that directly affected its customers

**WHEN JERRY GROSS CAME ABOARD** as executive vice president and CIO of Washington Mutual in June 2001, he had an open mind about outsourcing. The Seattle-based bank's 10-year, \$533 million outsourcing deal with IBM Global Services (IGS) dated back to 1996. As part of that deal, IGS provided desktop support, network services, help desk, network management, architecture and strategy for the \$17.7 billion company. Having just inked a deal with IGS himself in his previous position as the group executive of technology, operations and e-commerce of Sydney, Australia-based Westpac Banking, Gross wasn't averse to the idea.

To learn the lay of the land, Gross conducted focus groups with employees inside and outside IT, reviewed customer satisfaction data and compared notes with his peers. "I went through a fairly exhaustive process to find out what people's perceptions were of the services we were providing to them as customers, both internal and external," Gross says.

He found that IT's service levels were less than satisfying. For instance, it took up to a month to deploy a new computer for an employee. Another red flag: Calls to the help desk weren't getting answered in acceptable time. As a result, IT was getting a bad name.

Gross determined that the IGS deal, which made sense in 1996 when WaMu was in rapid growth mode (the company has acquired 32 companies in the past 20 years), was no longer serving the bank well. During the late '90s, WaMu relied on outsourcing just to keep the business running. But once the acquisitions slowed, the CEO made operational excellence and customer service top corporate goals. Outsourcing was negatively affecting those two new priorities. "It occurred to me that in some cases it would be better to reinsource back into the WaMu IT group because the functions involved such close interaction with customers," Gross explains.

But first, Gross says, he needed to get his house in order. Most technology development and strategy had been distributed to the business units, which had in turn further outsourced some of their IT to yet more providers, including IBM and Accenture. In effect, Gross says, there were a number of players internally and externally providing strategy and architecture advice to the company, ultimately fragmenting the IT department and the company.



### WASHINGTON MUTUAL

**REVENUE:** \$17.7 billion

**EMPLOYEES:** 51,000

**CONTRACT:** A 10-year, \$533 million deal with IBM Global Services for desktop support, network services, help desk, network management, architecture and strategy

**PROBLEM:** Disappointing service levels thwarted efforts to become more efficient and customer friendly

**SOLUTION:** Renegotiated contract and reinsourced help desk, network management, architecture and strategy

**RESULT:** Improved service levels and reduced the number of outside parties involved in setting IT strategy

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So Gross restructured the IT department in an attempt to get everyone "rowing in the same direction." Gross also wanted to begin running the technology department like a business. "We forced ourselves to be price-competitive with external service providers," he says. "We began to model ourselves after an IGS or other service provider." Gross implemented the Balanced Scorecard method of creating specific, quantifiable goals and monitoring performance as a way to stay on top of service levels.

The restructuring was key to proving to

the business that WaMu's IT division could reinsource further activities. "We were able to raise the quality of service levels and build trust and credibility with the business units," Gross explains.

At that point, Gross decided to take back the help desk, network management, architecture and strategy work—"all of the resources that directly affected our customers," he says. Although Gross would not reveal the costs, a business case analysis indicated that the company would see a return on the initial costs of insourcing within nine

**CIO.com** Thinking of bucking the outsourcing trend too? Get the story from Farmers Group CIO Cecilia Claudio for the next two weeks when you **ASK THE SOURCE** at [www.cio.com/ask/source](http://www.cio.com/ask/source).

to 12 months. But Gross points out, "Reinsourcing wasn't just about the cost. It was about the service levels and the value proposition to your customers. The benefits that one can get when service levels are improved are immeasurable."

So he simply picked up the phone and called IGS. "They weren't surprised when I contacted them," Gross recalls. "When you're in the IT services business, negotiation is a fact of life." Armed with a lawyer on his IT team and the knowledge that WaMu's size gave it great power in the negotiations, Gross worked through the legal issues and penalties involved in restructuring the contract and terminating some services. (IGS now provides only desktop support and hosting services.) To ease the negotiations, Gross made it clear that he "wasn't just picking on them." It was part of a larger strategy to extract greater value from all of WaMu's vendors.

"When the writing is on the wall that the restructuring is going to take place, [outsourcers] are reasonable," Gross says. It's a sign of the times for service providers. "They're feeling the slowdown," agrees Shaw Pittman's Murphy. "There's more pressure on them to be accommodating."

The biggest chunk of the reinsourcing—the help desk—took most of 2002. It was completely reabsorbed by December. Gross has staffed it with former IGS contractors and new hires. New strategic work, such as creating a single enterprise customer view, has already begun. And service levels are heading north. Now employees needing PCs wait days rather than weeks.

Gross says he would never again sign a long-term outsourcing contract. "It's too difficult to maintain accountability and maintain passion," he says. **CIO**

Senior Writer Stephanie Overby can be reached at [soverby@cio.com](mailto:soverby@cio.com).

## Breaking Up Is Hard to Do

When your outsourcing relationship is on the rocks, here's how to manage the split

**FIGURE OUT WHY THE DEAL'S NOT WORKING.** Conduct focus groups within the company, look at user satisfaction data, reexamine how the relationship has been managed—get as much information as you can to figure out the root of the problem.

**CHECK THE MATH.** If anecdotal evidence shows that service levels are not meeting expectations, take a close look at the metrics your outsourcer is providing and conduct your own service-level studies.

**TALK.** Negotiation is an everyday occurrence for outsourcers, says Jerry Gross, Washington Mutual executive vice president and CIO. They expect renegotiation during the life of an IT outsourcing contract. With IT services providers struggling, experts say, they're anxious to please.

**FIND A WAY OUT.** If renegotiations fail, check the fine print. "If the outsourcer isn't willing to play, bring in someone who's got experience fixing bad deals," says Cecilia Claudio, senior vice president and CIO of Farmers Group.

**APPROACH INSOURCING WITH CARE.** Build a cost model for doing the work in-house, conduct an internal skills gap assessment, and maintain a focus on service-level requirements just as you would with an outsourcer.

**SELL IN-HOUSE CAPABILITIES.** If you decide to reinsource, the first question the board will ask is, Can the IT department handle the work? Conduct a full-scale pilot to show your team's readiness, or improve service levels in the work your group is already providing.

**EASE EMPLOYEES INTO IT.** When bringing outsourced IT back in-house, CIOs face a double challenge: getting existing IT staff on board with the idea and luring some of the outsourcer's staff to sign on full time. The key to handling these problems is honesty. Be up front about the possibilities in the new arrangement.

**MAKE OUTSOURCING MANAGEMENT A CORE COMPETENCY.** Even if you never outsource again, these aptitudes can be used in any kind of vendor relationship. That may mean setting up an entire department devoted to vendor management or seeking outside assistance.

—S.O.





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# Case Files: Maricopa County Department of Justice

## INTEGRATION INITIATIVES

APPLIED WIRELESS

CUSTOMER CONNECTIONS

VALUE SYSTEMS

### ORGANIZATION

Maricopa County Dept. of Justice

### PRINCIPLE BUSINESS

County government

### HEADQUARTERS

Phoenix

### USERS

Approximately 2,000 workers within the criminal justice system; 70,000 "clients," or subjects, arrested every year

### URL

[www.maricopa.gov](http://www.maricopa.gov)

### INTEGRATION PROBLEM

To establish a convergent architecture that would enable disparate law enforcement agencies to share information efficiently and effectively.

### THE PLAYER

#### LARRY BERNOSKY

Manager of data integration for the Integrated Criminal Justice Information System agency

### CASE ANALYST

#### CAROLYN PURCELL

CIO of the state of Texas and member of the board of directors for NASCIO

# Jailhouse Talk

Overcrowded jails, criminals slipping through the cracks, missing case file information—Maricopa County's law enforcement agencies desperately needed to start sharing information **BY TODD DATZ**

**ELVIS NEVER SANG** about jailhouse IT, nor has Eminem for that matter, but Larry Bernosky is singing the praises of how technology is helping streamline the criminal justice system in Arizona's Maricopa County. Population in the county, which encompasses the greater Phoenix area, grew by 50 percent during the 1990s.

That growth hasn't slowed down at all—Maricopa is the nation's second fastest-growing county and home to 3.2 million people. As the population has grown, however, so too have the accompanying undesirable elements. The number of arrests and criminal case filings has increased dramatically. The county's eight jails, built to accommodate 5,600 inmates, now house more than 8,000. To help alleviate overcrowding, Maricopa residents passed Proposition 400—the so-called jail tax—in November 1998. Proposition 400 instituted a temporary seven-year sales tax to raise \$900 million to build and operate new jail facilities.

County officials soon realized they needed more than just new jails. The county's criminal justice information systems were in need of a major overhaul. In 1997, Maricopa hired Chinn Planning, a division of RNL Design, an architectural consultancy with offices in Phoenix, to evaluate its criminal justice system in light of its soaring population. The report not only confirmed the need for more jails but also concluded that the county needed to do a better job of automating and integrating its information systems. There were myriad problems—redundant data collection, error-prone manual data entry, ad-hoc interfaces, replicated functions, lack of a unique common case identifier and lots of paper. Data was gathered primarily by telephone, fax and onsite visits. None of that data was shared electronically. The result was unreliable and unavailable information.

To tackle those problems, the county earmarked \$25 million from Proposition 400 to



create a cross-departmental group, the Integrated Criminal Justice Information System (ICJIS) agency. Its primary mission was daunting—create a convergent architecture to improve data sharing among the county's five major criminal justice agencies. Following the passage of Proposition 400, those five groups—the sheriff's office, county attorney, superior court, clerk of the court and indigent representation agencies—established an executive committee that comprises the heads of each of the five groups to determine policy and guide ICJIS's integration efforts. The executive committee established a business team of operational leaders from each group to deal with budgets, policies and other activities to fulfill ICJIS's mission.

ICJIS hired a director, John Doktor, in February 2000. In January 2001, Bernosky joined the agency as manager of data integration and started to assemble his IT staff. He is responsible for making the convergent architecture a reality.

## ARCHITECTURAL AGREEMENT

The vision of ICJIS is "to enhance public safety, improve service to the community, and promote quality justice and law enforcement decision-making by sharing information that is timely, secure, reliable and comprehensive." When Bernosky joined ICJIS, he knew achieving those objectives would be fraught with hurdles. Each of the five criminal justice agencies had its own IT department, as well as unique hardware, systems, databases and operating systems. Each agency had built its systems with no overarching view toward building an integrated architecture. "From an IT perspective, they pretty much operated autonomously," says Bernosky.

In addition to the technological challenges, there were political challenges that immediately reared their ugly heads. The agencies squabbled over who should develop the plan. "It was perceived that any county organization—the county CIO, a justice agency, even ICJIS—would have a bias toward some technology or architecture

direction that would benefit them and make it difficult for the others," Bernosky says.

To resolve that issue, the agencies decided to bring in an outside broker to referee the process. In early 2001, ICJIS hired Emerald Solutions, an IT consultancy in Portland, Ore., to develop a plan. Later that spring, Emerald delivered its report, which assessed the IT infrastructures of each agency, came up with a set of integration requirements and architecture options, and offered a list of recommendations. That list became the basis for the new architecture upon which ICJIS and the five agencies agreed.

The agency decided on a J2EE development environment with a middleware layer for data and an EAI system called Cloverleaf (purchased from Healthcare.com, which was later bought by Quovadx). ICJIS uses IBM's Websphere for developing Web applications, partly because Bernosky doesn't

have many Java engineers on his staff, and he couldn't afford new ones.

## TO COLLECT AND TO PROTECT

One of the first major projects Bernosky and his staff began tackling in summer 2001 was called the common case number (CCN) system. Previously, the different agencies assigned multiple numbers to the same criminal cases. The result was confusion for victims, witnesses and attorneys; delays in case processing; and an added layer of complexity to the case flow process. With the CCN system, justice agencies enter information electronically in real-time, which decreases errors and expedites processing.

Before developing the CCN system, ICJIS did extensive mapping of the criminal justice process, which includes investigation, detention, initial appearance, probable cause

# SHARE AND SHARE ALIKE

BY CAROLYN PURCELL

**CONCENTRATED EFFORTS BY** local, state and federal organizations during the past decade have focused attention on the need for improved information sharing. Initiatives like Maricopa County's are sprouting up in many places. The county's emphasis on data modeling demonstrates its seriousness and bodes well for its success. I hope it also considers the emerging national standards for legal and law enforcement XML schema.

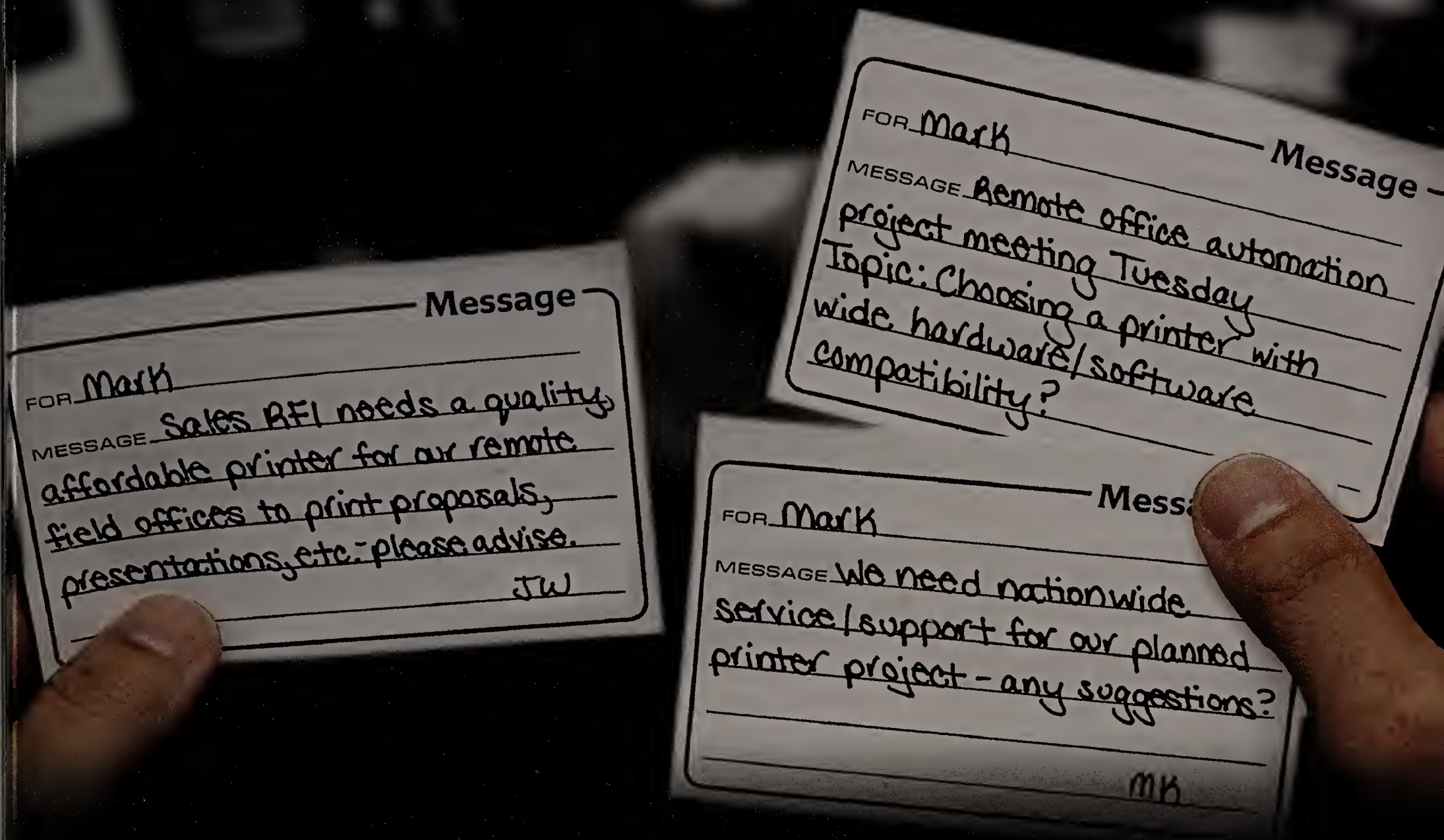
I suspect that as Maricopa County faces the issue of how to protect and secure information, its identity management problem will morph into a problem of identifying system users. The common case number application is a sterling example of this. Successfully identifying individuals across databases, whether they are users or objects, raises privacy fears and heightens security concerns.

Maricopa County will realize its greatest benefits during phase two, as it enables communication with other jurisdictions across the country. The recent sniper attacks in the Washington, D.C., area demonstrated how quickly sharing standardized data between jurisdictions can expedite the capture of an elusive perpetrator. The county's major focus is on ensuring trust and continued cooperation and collaboration. As IT helps simplify processes, the complexity moves into governance. It strikes me that Data Integration Manager Larry Bernosky appreciates the role of governance and has emphasized his customer relationships as essential to making this coalition work.



Carolyn Purcell is the CIO of the state of Texas and serves on the board of directors for NASCIO (the National Association of State CIOs).





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determination, arraignment, trial and sentencing, just to name a few. Within each of those major processes are numerous other processes. The agency concluded that assigning a common case number to every case would help eliminate confusion, streamline the justice process, reduce errors and facilitate consistent case tracking.

ICJIS first replaced the procedural programming environment based on specific languages with a business rules environment based on processes. This would simplify interaction between the businesspeople and programmers who needed to work together on CCN and other integration projects.

Defining those requirements was anything but straightforward. The five agencies and their five IT departments needed to agree on parameters every step of the way, so there were plenty of disagreements. The two most

controversial issues ICJIS dealt with are data ownership and security. The agencies were concerned that the CCN application was compiling a large, centralized data repository that would not be adequately protected or might allow unauthorized access. (For example, closed grand jury information is available *only* to the clerk of the court.) Bernosky assured the agencies that there wasn't a repository and that any data saved would be used strictly to validate case request numbers.

However, he will continue wrestling with the issue of centralized versus decentralized data. "We'll never have a centralized database, but we must satisfy concerns that data collected will be protected," Bernosky says.

After a year of analysis and six months of development, the CCN successfully launched in January. The key metric is reassurance. When a user such as an attorney or a judge sees case information downstream in the system, he can be assured it's the same case information originally entered into the system. This is a seemingly simple solution, but in IT, the end often doesn't reveal the difficult reality of the means.

## TIPS FROM THE INTEGRATION TRENCHES

As the manager of data integration for Maricopa County's Integrated Criminal Justice Information System agency, Larry Bernosky offers some advice for moderating massive integration projects

- 1. Treat each organization as a valued customer.** "You need to have a common process and architecture so the big guys don't dominate the little guys," he says.
- 2. Be patient.** Allow time for vetting.
- 3. Make detailed and continuous plans.** Ensure schedules are in place, interfaces are detailed, documents are current and testing is comprehensive so that agencies have a continuous view of what is happening and what is expected of them.
- 4. Stay in touch.** Give briefings and reviews so that people don't wander away and lose interest.

## CONVICT TV

Countless movies and TV shows have depicted the classic jail visit scene in which a convict is brought to a common area, plopped down in a folding chair and allowed to talk to a loved one through a Plexiglas barrier. In Maricopa County, that scene is radically changing. The county is piloting a video visitation system that obviates the need for face-to-face visits. According to Bernosky, it's the first operational implementation of such a system of its size and capability in the world.

Why switch from Plexiglas to LCD? While not as integral to Maricopa's integration efforts as the common case number project, the video visitation system was developed within the convergent architecture and will improve safety and save time and money by helping jail officials minimize prisoner movement. When the new Fourth Avenue jail opens in early 2004, prisoners

will have to move only a short distance from their cells to access the nearest video booth. "That can save thousands of dollars a month," says Bernosky.

The system is currently operational at the Estrella jail in downtown Phoenix. Each setup includes a full-motion video link, using high-resolution cameras and a 17 inch screen at each video station. Estrella hosts about 6,000 visits a month on the new system. Bernosky hopes to eventually expand the system to defense attorneys' offices to allow them more efficient access to their clients.

## LIFE SENTENCE

Bernosky hopes the county decides to make the ICJIS organization permanent, especially since the programs it's putting in place will require ongoing maintenance. In the meantime, he continues to treat the agencies as valued customers. "We're a facilitator," he says. "We have to feel their pain."

The ICJIS has used about \$6 million of the \$25 million earmarked for its integration efforts so far. It's currently in the first of three phases: integrating the county justice system data, which is scheduled to run through 2005. The second phase will involve building external interfaces to local, state and federal systems. And in the third phase, the ICJIS plans to expand the network infrastructure to allow public access to criminal justice system information. The latter two phases have not yet been budgeted, funded or approved.

As people continue to flock to Maricopa County, attracted by its warm weather and easy access to a round of golf, there's little doubt that police, lawyers and judges will remain busy and more of Maricopa's seedier residents will be doing time. In the meantime, Bernosky and the rest of the ICJIS team will continue weaving systems together to ensure the people working in the criminal justice agencies can get their information more reliably and efficiently. **CIO**

Senior Editor Todd Datz can be reached at [tdatz@cio.cio](mailto:tdatz@cio.cio). Contact Features Editor Lafe Low at [lflow@cio.com](mailto:lflow@cio.com) with your integration tales.

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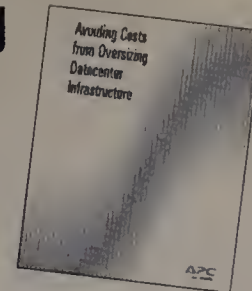
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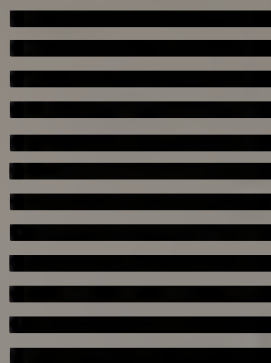
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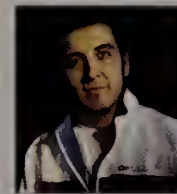
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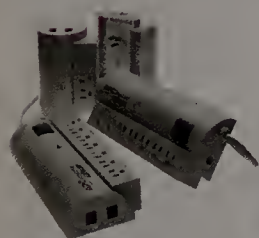
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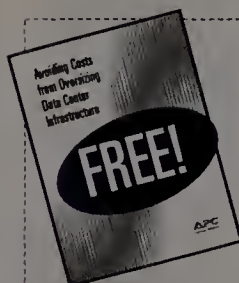
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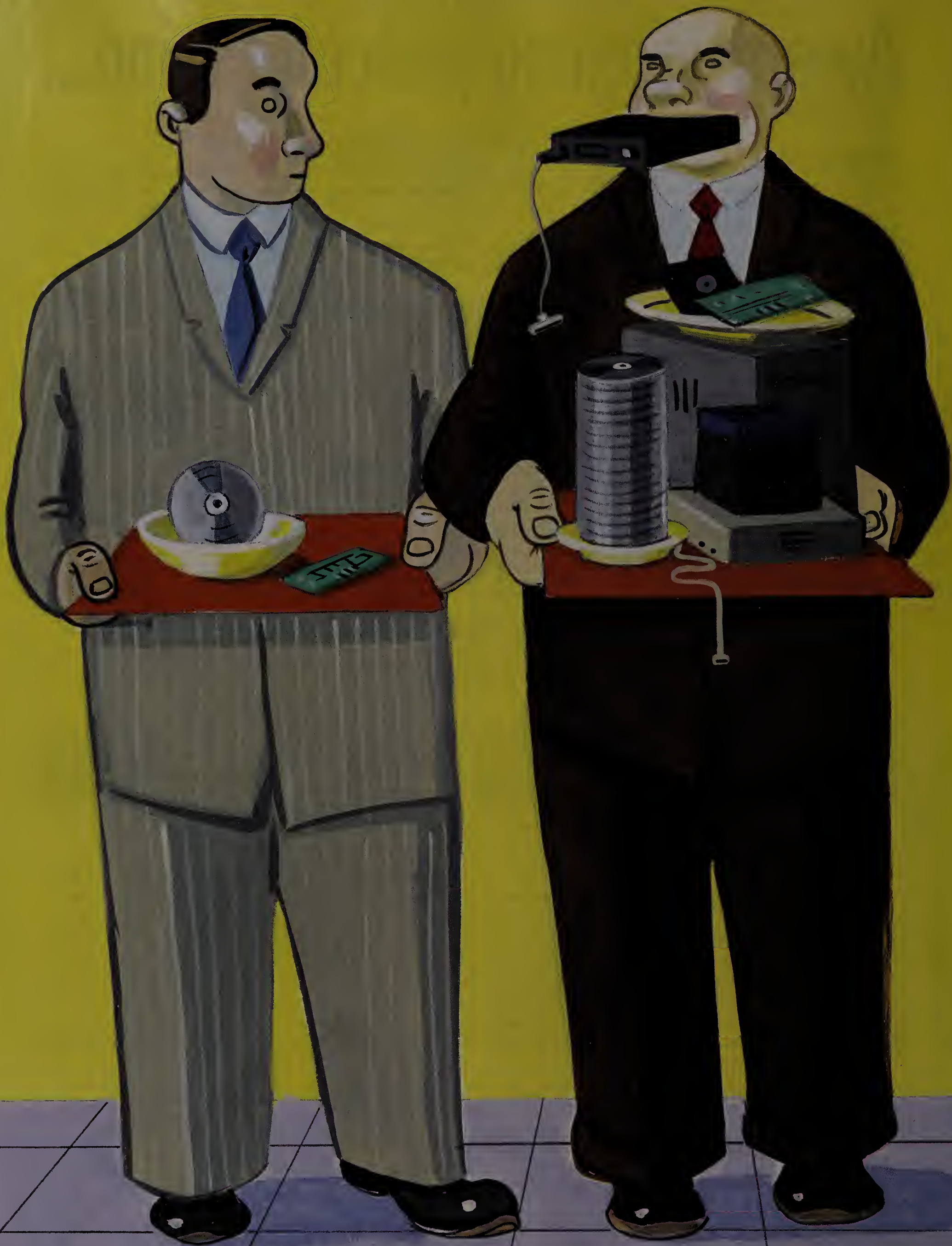


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Charging users for IT costs can rein in budgets and bring rigor to planning, but it can also turn you into an unpopular bean counter

BY MALCOLM WHEATLEY

# Chargeback for good or evil

**With CIO budgets under pressure, there's an almost irresistible allure to the notion of chargeback**, wherein IT costs are literally charged back to the user departments on whose behalf they were incurred. In this way, the IT budget stops being an ever-expanding money pit, endlessly

consuming hardware, software and bandwidth—and instead the tab is picked up by the people who actually use the stuff. At a stroke, budget justifications become a cinch. "Of course we need this level of expenditure," the CIO can assure the board. "If we didn't, the users wouldn't be ponying up the money for it." Even better, the shock of actually having to pay for what they consume transforms users from hungry conventioners at an all-you-can-eat buffet into disciplined dieters.

## Reader ROI

- ▶ Why chargeback's goals are so laudable
- ▶ What CIOs have done to realize the benefits of chargeback and avoid the pitfalls
- ▶ How to know whether chargeback is right for you



No wonder, then, that chargeback's proponents are so enthusiastic about its merits. Bob Odenheimer, for example, believes chargeback not only shifts the burden of IT expenditure justification onto the newly cost-conscious users but also injects a note of rigor into the enterprise's business model. "If you look at a small business, its IT costs are reflected in its profitability," says Odenheimer, senior vice president of IT operations and telecommunications at managed behavioral health services provider Magellan Health Services in Columbia, Md. "It buys the gear—and has to pay for it. Why should it be any different at a large business?"

It's more than just a question of even-handedness. When IT expenses are retained within an overall IT budget, rather than charged back to departmental cost centers, companies can't get a handle on the real costs of winning new business, complains Odenheimer. "If it helps their unit's profitability, there's nothing to stop them from taking as much IT as they can get—even if the actual IT cost [to the business as a whole] is higher than the revenue it produces [on the unit level]," he says. Chargeback, in Odenheimer's view, prevents that by forcing users to reconcile within their own budget the marginal cost and marginal profitability of new business.

Bob Svec, president of TSL, a chargeback consultancy in Parsippany, N.J., sees a chargeback-related slant on the age-old centralization versus decentralization debate. Chargeback, asserts Svec, "offers the best of both worlds. You've got the efficiencies of centralization, combined with the ability to let people see what they are getting, and how much they are paying for it."

Taken together, such arguments have quickly elevated chargeback into so-called best practices territory. Consultants laud its merits, and vendors have sprung up to handle the dollars and cents of charging. But CIOs have found a dark side to chargeback too. It can become a political hot potato and an administrative nightmare. Many CIOs have come up with workarounds, but others find chargeback so problematic that they've sworn off it entirely.

The essential difficulty with chargeback is a conceptual one. Weighing the pig, critics charge, doesn't actually make it any heavier. Shouldn't IT resources be spent on, well, IT, rather than on figuring out who owes what to whom? And isn't the allocation of IT resources better carried out by, say, a steering committee than by a clerk with a spreadsheet?

### **The Trouble with Chargeback: "What Forest? All We See Are Trees"**

Richard Scannell, cofounder and vice president of corporate development and strategy at Framingham, Mass.-based consultancy GlassHouse Technologies, observed the use of chargeback while at Motorola, where he spent 12 years as a senior IT manager, ultimately heading up a group of 160 IT people in Chicago. Chargeback at Motorola was based on headcount. That works in theory, says



## **the dark side of the force**

### **MISUSED CHARGEBACK CAN INCREASE I.T. SPENDING**

Chargeback can be improperly applied, with disastrous results. A faulty chargeback system led to outrageous IT costs at USAA, a \$10 billion financial services company in San Antonio that serves U.S. military personnel and their families. The experience with chargeback contributed to the company's decision to split the IT function into a standalone business unit, says Steve Yates, who in most other businesses would go by the title of CIO, but instead is styled as the president and CEO of USAA's Information Technology, an entity legally separate from the parent company.

A simplistic application of chargeback, recalls Yates, had led USAA into a high-cost death spiral by the time he arrived in 1999. Directly linked to divisional revenue, the cost allotments bore no fixed relation to IT usage. And with charges set at the beginning of each fiscal year, no adjustments were made in the event that divisional usage came in under budget or that planned expenditures weren't made. The result, he says, was a chargeback system that produced the wrong kind of behavior. "IT costs kept climbing—it was a kind of creeping socialism, with people saying, Hey, I'm being taxed for it, so I'll have more of it. Year after year, IT costs would ratchet upwards," Yates says. By the end, IT expenditure was growing four times faster than company revenue, a rate that was clearly unsustainable.

Prior to Yates's appointment, a decision had already been made to move away from chargeback and instead to adopt a kind of "internal outsourcing" model, where divisional charges were more directly linked to costs—meaning that the business units effectively outsourced IT to the IT function, but on a pay-as-you-go basis, buying the functionality they needed and no more. But things went from bad to worse in Yates's first year. Inaccurate assumptions about utilization rates, unexpected indirect costs and wildly uneven programming requirements over the calendar year led to a sea of red ink—and red faces, as Yates and his equally new CEO scrambled to first explain what had gone wrong and then prevent it from ever happening again.

Yates has since brought IT costs under control. Horror stories of roomfuls of junked PCs (still on lease and still on maintenance) at locations across the United States are now a distant memory, IT headcount has dropped from 3,800 to 2,700, and overall IT spending as a percentage of revenue has fallen by 3.5 percent since 1999, Yates says. He is left with an appreciation for the power of chargeback to change behavior—but not always in the manner intended.

—M.W.





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Scannell, but in practice quickly turns sour.

"If the electric company turned around and said, There's 2,000 people in your town, and we're going to divide the town's usage by 2,000 and charge each of you a two-hundredth of the total, then you'd likely object," he says. "If it doesn't work with power, why should it work with IT?"

In reality, Scannell contends, people don't consume resources evenly—nor do IT systems. "A lot of data is held in databases, not files, and is accessed by multiple functions and multiple people—how do you even begin to charge back in that scenario?" he says. Then there's the problem of people moving about the organization. "If I have a lot of files associated with an individual working in human resources, what happens if that individual moves to marketing? Does marketing get charged for human resources' files?" Because of unanswered questions like these, Scannell chose to do without chargeback at Motorola.

fair share. In the end, it comes down to this: What am I being paid to do? And I think I'm being paid to do more than just debate MIPS and CPU cycles."

That's not an exaggeration. When working for a multibillion-dollar health-care company in the mid to late 1980s, Nordin recalls, "we had an entire department within IT called IT Accounting. And that was all it did: count MIPS." There's no way, he insists, that he's ever going to manufacture that much red tape himself.

### Making Chargeback Work: Simplify, Simplify

So how, then, does Nordin charge back at A.M. Castle?

"We don't try to charge back everything, nor do we avoid chargeback altogether," he says. His golden rule is that he charges only for things that are inarguable. "I charge for non-shared IT expenses where I can put my hand on my heart and

**"I've worked in IT environments where every single IT expense was allocated back out," says A.M. Castle CIO John Nordin. There's no way, he says, that he's ever going to manufacture that much red tape himself.**

Kevin Vitale, president and CEO of Ejacent, a chargeback software vendor in Mountain View, Calif., sees a link between chargeback and poor server utilization. Data centers typically have server utilizations on the order of 10 percent to 15 percent, he asserts, which in normal circumstances would prompt a server rationalization project. "But then, chargeback gets more complicated," he says. With one server per application or per business unit, chargeback is relatively straightforward. Combine applications on a server, however, and the arguments begin over how big a tab each department should pay.

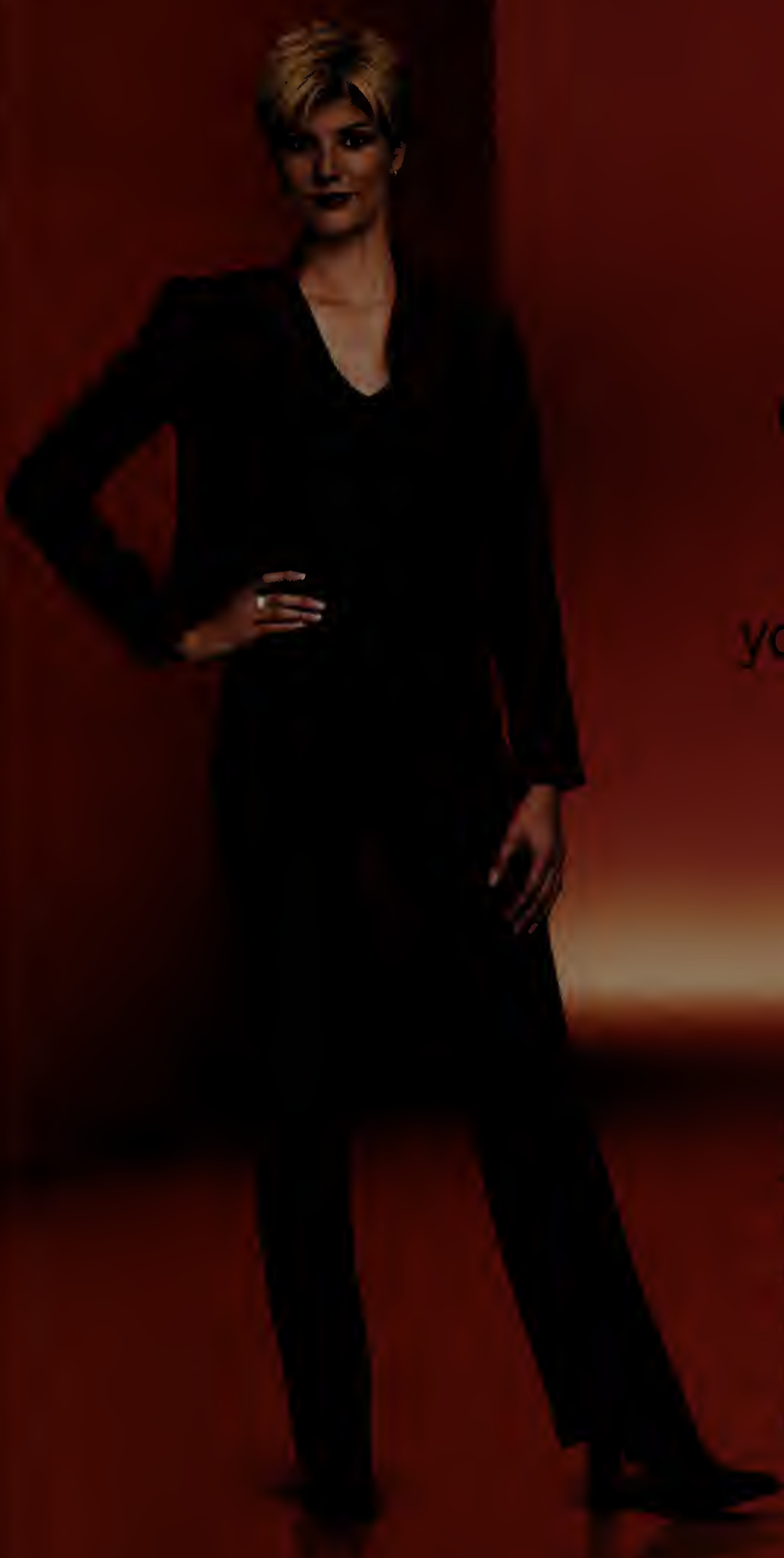
It's precisely such wrangles—or rather, the prospect of them—that influences John Nordin's decision to hold back from full-blooded chargeback in favor of a less contentious middle ground. "I've worked in IT environments where every single IT expense was allocated back out, leaving IT as basically a zero-cost operation," says Nordin, vice president and CIO of specialty metals manufacturer A.M. Castle, headquartered in Franklin Park, Ill. "But it's way too much work. It's a never-ending debate over what constitutes a



say, This is your expense. So it's things like printers, phones, fax machines—that sort of stuff," he says. Business applications, on the other hand, reside at the center on a number of servers and are not charged out. "We tend to bring that sort of expense up to the top, and call it IT Budget," he says. "We're running a lean business in a lean industry, and the idea of having people running around pushing numbers just appalls me."

Of course, business applications can account for the majority of enterprise IT spending. Some CIOs have figured out how to charge back those costs without getting swamped. B. Lee Jones, CIO of San Jose, Calif.-based Stratex Networks, a manufacturer of wireless transmission equipment, sits down with the company controller at the start of the budgeting process to review chargeback allocations "to make sure that they are reasonable. After that," says Jones, "the system pretty much runs itself."

And runs itself fairly efficiently too. Stratex has no one employed in either the finance or IT functions whose primary responsibility is operating the chargeback



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scheme within the company, says Jones. He estimates that it probably takes no more than a couple of hours a month to work out the allocations.

Which sounds reasonable. On the other hand, the company's IT systems undeniably lend themselves to such a lean and laid-back approach. Jones—one of 2002's CIO 100 Award honorees—sits atop an IT infrastructure populated by almost every vendor known to man. "All our projects are user-driven, which is why we've wound up as a best-of-breed shop," he says. "We'll always pick the best application for a particular function."

The result is considerable simplification of the chargeback process, since each application is run by a single group of users. The PeopleSoft app is charged to the human resources department. Agile? Charged to document control and quality assurance. Oracle? The manufacturing part gets charged to manufacturing operations, the finance part to the finance function. Clarify? That would be the maintenance and repair function. Siebel? Charged back to sales. PC technical support gets charged back based on the number of PCs each function has, while stor-

tools" to standardize user PCs around an approved configuration.

Furthermore, Odenheimer retains a specialist company to analyze all telephone, fax and data line invoices, screen them for errors, and then break them out by business unit or department. "They always find something—always," he says. "It's an ROI of 300 percent—they save us three times what we're paying them."

### Change With—or Without—Chargeback

Chargeback is no panacea for getting a handle on an enterprise's IT spending, and there is no perfect chargeback system. Nordin of A.M. Castle has no quarrel with chargeback's theoretical advantages—just its practical downside. "Would I ever espouse a full chargeback system?" he muses. "Yes, but only if I could get a 100 percent metered technical process in place—which in our environment is unlikely." The difficulty: a mix of mainframe boxes, Unix and NT servers, packaged software, and home-grown systems. "Vendors are looking at the problem from the data center perspective, but that's only part of it," he says. "In reality, people have phones and BlackBerrys and PDAs as well—

**If all you do is reshuffle costs within the company, then chargeback probably isn't worth it. But if you think that people will make better decisions by being forced to confront the cost, then there is value.**

—KEITH KACZANOWSKI, VP OF PROCESS IMPROVEMENT, BRADY CORP.

age is charged back based on each function's headcount. There is some central overhead, but most of it is charged out, using such straightforward allocation rules as headcount.

The underlying philosophy of chargeback at Stratex is simplicity and practicality. "We don't put any monitoring timers on equipment in order to see how it's used," Jones says. "We assume that usage will be a normalized distribution both within individual departments and across the enterprise." In other words, over time, the assumption is that any inconsistencies will average out.

But will they? While not every organization's business apps can be divvied up so tidily as Stratex's, CIOs can still apply simplicity and practicality to chargeback. For example, after Magellan Health Services' Odenheimer charges back at actual cost any expenses that can clearly be identified within a particular business unit or site, he adds up other expenses such as LAN and

desktop support costs and allocates them on a headcount basis—on the assumption that IT support costs will be evenly spread. "As they will be," he insists, "if you use the right desktop

so I don't believe we're going to get there any time soon."

Ultimately, chargeback is meant to prod users into changing their behavior. If a chargeback system fails to accomplish that, it's a failure, no matter how good the accounting is. Chargeback is wearily familiar to Keith Kaczanowski, vice president of process improvement at Brady Corp. of Milwaukee, a manufacturer of signs, labels and associated printing equipment. "If all you do is reshuffle costs within the company, then chargeback probably isn't worth it," he says. "But if you think that people will make better decisions by being forced to confront the cost, then there is value."

"We used to charge \$X per person per year, but found no one changed any decisions," concludes Kaczanowski. "Instead, they just grumbled about a perception of low value. So now we don't charge out at all." It was, he adds, "pretty much a consensus decision. A lot of our IT expenses turned out to be for enterprisewide activities—servers, WANs and enterprise applications. Taking it back does a better job of matching where the decision is taken to where the costs are." **CIO**

**CIO.com** Are chargebacks a political hot potato or savvy business practice in tight times? Have they worked for you?

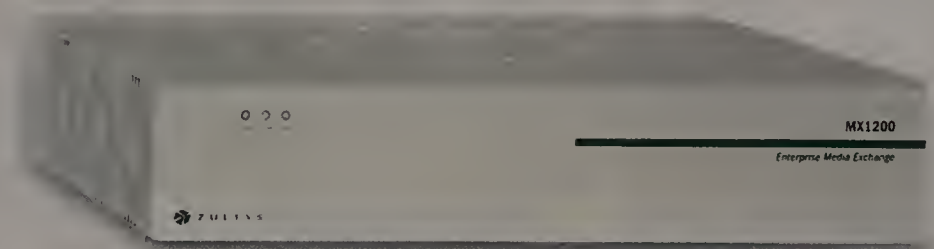
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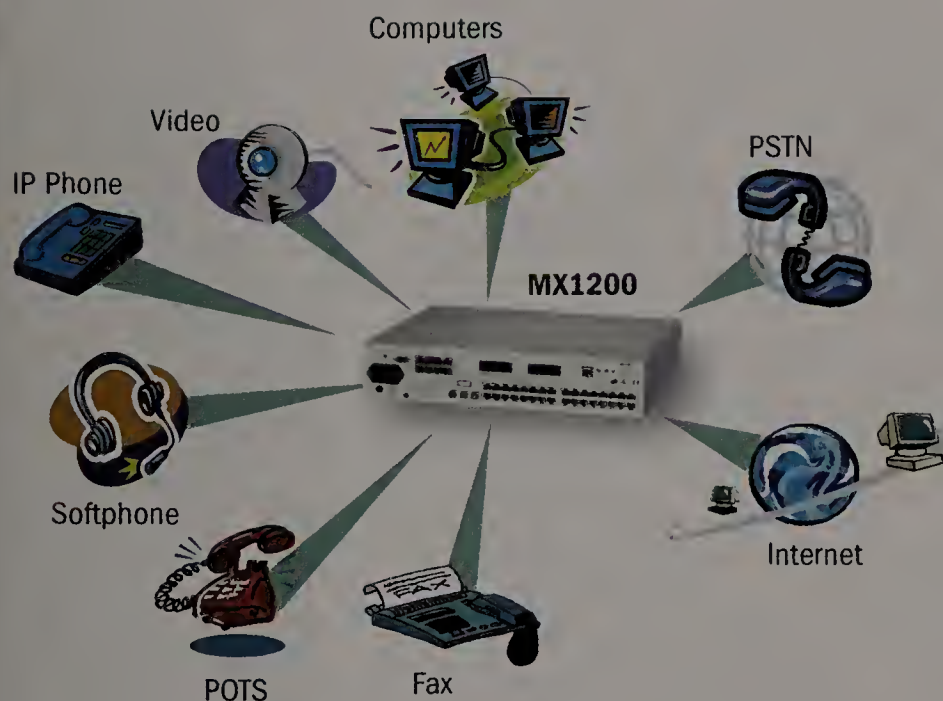
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# Are You the Strong, Sensitive Type?

*CIOs who cultivate a sensitivity to others' needs are better managers and lead more effective organizations. Take our quiz to see where you stand.*

BY MERIDITH LEVINSON

#### Reader ROI

Why emotional intelligence is an important skill for managers to cultivate

How E.I. can help an organization's productivity

A quiz to test your E.I.



**L**ike you, Alan Hughes believes employees should check their personal problems at the door when they enter the office. But Hughes, CIO of GE Commercial Distribution Finance in St. Louis, also realizes that doing so is not always realistic. "We all go through different crises in our lives. They're distractions. You can't help but bring them to work, either consciously or subconsciously," he says.

Hughes injects this understanding into his work, and it pays off. Recently, one of Hughes' direct reports—a valued employee—knocked on his office door and told him that she was going through a divorce. She said she didn't think it would affect her performance. But she was late for work. She missed

# test

## Your Emotional Intelligence

The purpose of this exercise is to help you understand how emotional intelligence (E.I.) comes into play in organizational settings and to give you a tool to assess your E.I. competence. The more truthfully you answer, the more accurate the picture you will get of your E.I. If you are interested in further testing and developing your E.I., check out [www.eiconsortium.org](http://www.eiconsortium.org), the online home of The Consortium for Research on Emotional Intelligence in Organizations.

These questions have been adapted for CIOs' work situations from two sources: an online survey by the Hay Group, and an article, "Developing Emotional Intelligence in the Workplace," by Wendy Alfus Rothman in a newsletter for career counselors called *The Five O'Clock News*. —M.L.

- 1** You're in a meeting in which executives are discussing the company's ERP implementation when the VP of supply chain takes credit for work you did. What do you do?
- A**) Confront the VP right then and there. After all, you're no pushover, and it's not fair that he get the credit you deserve.
  - B**) After the meeting, take the VP aside and tell him that you would appreciate it if in the future he would credit you when speaking about the work.
  - C**) You don't do anything. You hate conflict, and you know nothing would be gained either by making a scene or by confronting the VP.
  - D**) After the VP speaks, thank him for the work he did and give the group more specific details about what you were trying to accomplish and the challenges you overcame.

*Continued on Page 80*



meetings. Her performance slipped. Hughes talked to her. "I said, 'I know you're going through a difficult time right now. One thing that I ask is, if you're not going to be in a meeting, please let me know,'" he recalls. He also worked with her and other members of the department to lighten her workload and lengthen some project deadlines. In so doing, Hughes and his team were still able to meet project milestones.

"As a leader, it's important to know those things [going on in people's personal lives] so you can make adjustments," says Hughes, who is 43 years old. If you don't, he adds, "projects will fail. Things won't get done on time. If you know what's going on and you can manage around it, chances are you can help them through their problems better

too." Not to mention retaining a proven performer. Hughes incorporates what psychologists call emotional intelligence (E.I.) into his management style, and experts say CIOs would do well to follow suit.

The term *emotional intelligence* refers to a person's ability to take control of situations by tuning in to and managing one's own and others' emotions. The approach can mitigate the emotional toll personal problems and organizational changes like layoffs and mergers can have on those involved. It can help managers keep employee turnover low and projects on track.

It may sound touchy-feely, but it's not, says Wendy Alfus Rothman, president of The Wenroth Group, a human resources consultancy in New York City. "E.I. is not

just for women. It is not for people that are into harmony and peacefulness. In fact, it is a real intelligence," she says.

Experts argue that E.I. directly impacts productivity and profits. For example: Richard Boyatzis, professor and chairman of the organizational behavior department at Case Western Reserve University in Cleveland, assessed the senior partners in a multinational consultancy and found that those who exhibited E.I. competencies more frequently delivered over \$1 million more in annual profits from their accounts than did other senior partners.

For a measure of your emotional intelligence, take our quiz (see "Test Your Emotional Intelligence," Page 79). If you find you're emotionally blind, fear not: There's

## Test Your Emotional Intelligence

Continued from Page 79

**2** The VP of marketing has just called to complain about the CRM system your IT staff is delivering. He is angry and rude. What's your response?

- A** Tell him to take a long walk off a short pier. You don't have to put up with ill-informed nonsense.
- B** Listen, repeat back to him what you hear he is feeling, and tell him you sympathize.
- C** Explain how he's being unfair. Help him understand that the system your department is working so hard on eventually will help him and his department.
- D** Tell him you understand how frustrated he is, and offer a specific measure you can take to please him.

**3** Your company is working to encourage respect for racial and ethnic diversity. What do you do when you overhear someone making anti-

Semitic comments about Sen. Joe Lieberman?

- A** Ignore it. Heck, you can't stand the Connecticut Democrat either.
- B** Call the person into your office and explain that his behavior is inappropriate and is grounds for disciplinary action if repeated.
- C** Confront the person on the spot, saying that such comments are disrespectful, inappropriate and won't be tolerated in the company.
- D** Suggest to the person making the comments that he take a diversity training program or recommend that he read Jean-Paul Sartre's essay "Portrait of the Anti-Semite."

**4** A colleague enters your office upset over an incendiary e-mail he received from a client. How do you go about calming him down?

- A** Change the subject. Tell him a joke or a story—anything to

get his mind off of it.

- B** Suggest that he might be overreacting.
- C** Take him out for a cup of coffee and tell him about the time something like this happened to you and how angry you felt, until you realized that the client's anger was in fact justified.
- D** Tell him you understand. You know that the client is a real jerk.

**5** A discussion with a colleague has escalated into a full-blown argument, and you both start trading personal insults that you certainly don't mean. What do you do?

- A** Suggest taking a 20 minute break before continuing.
- B** Walk away.
- C** Apologize, and ask that your colleague apologize too.
- D** Pause, collect your thoughts, then restate your case as unemotionally as you can.

**6** You are asked to manage a team of developers that is building a new portal. The team has discovered a software bug but can't come up with a solution. What do you do?

- A** Draw up an agenda, and call a meeting during which you discuss the problem and possible solutions.
- B** Organize an offsite to help the team get to know each other better.
- C** Begin by asking each person for ideas about how to solve the problem.
- D** Organize an informal brainstorming session over lunch. Encourage people to share whatever solution comes to mind, no matter how wild.

**7** One of your programmers has been promoted to a managerial position. You notice that she appears unable to make the simplest decisions without seeking your advice. What do you do?

- A** Have an HR representative talk with her about where she



hope. With time and commitment, you can possess the power to increase your E.I.

## The Roots of E.I.

### E.I. IS ACTUALLY AN INHERENT SKILL

that humans have possessed for thousands of years, says Fabio Sala, a Boston-based senior research consultant with Hay Group, an HR consultancy. Sala says the ability to sense emotions goes back to primitive man, when, in order to survive, he needed to quickly and accurately assess potentially dangerous situations by analyzing humans' and animals' nonverbal behaviors.

The modern study of E.I. began in the 1970s. Psychologists, most notably David McClelland, were trying to determine what

makes people professionally successful. At Harvard University, McClelland studied how different organizations and the people in them worked, and tested people's so-called soft skills—how they related to others—as well as looking at their IQ and technical skills. Researchers found that soft skills were equally—if not more—important than raw intellect in determining a person's achievement and an organization's success.

Another IT-specific example demonstrates how strong E.I. can make a positive impact (and weak E.I. can hurt). Cary Cherniss, a professor of applied psychology at Rutgers University, and coeditor with Daniel Goleman of *The Emotionally Intelligent Workplace*, cites a study at Bell Labs some years ago that looked at a pair of skilled help desk

technicians. One person had a good E.I. evaluation, while the other did not.

It turned out (no surprise) that when end users had problems, they sought out the emotionally intelligent help desk colleague and avoided the other. If the favorite wasn't available, end users tried to fix things themselves. The person with a stronger E.I. was not only more effective at his job, he also helped the company as a whole improve its productivity, Cherniss says.

E.I. went mainstream in the mid-1990s, when Goleman, a former research writer for *The New York Times*, published *Emotional Intelligence*, in which he argues that E.I. is the strongest indicator of an individual's success. Soon after, E.I. took the business world by storm.

sees her future in the organization. Maybe this position isn't right for her.

- B** Accept the fact that she does not have what it takes and find others to assume her responsibilities until you can find a replacement.
- C** Give her lots of difficult, complex decisions to make so that she will become more confident in her role.
- D** Engineer an ongoing series of manageable experiences for her, and make yourself available to act as her mentor.

completing his work so that you can find a way to lighten his load during this difficult time.

- C** Suggest that work affords an excellent opportunity for him to take a mental break from his problems.
- D** Tell him that the definition of a professional is someone who doesn't allow his personal problems to affect his work.

their concerns alienates you from others and jeopardizes your professional relationships. Unless you get some coaching, it won't be long before your emotional density derails your career.

### 25-54: Lukewarm

You get points for recognizing your own difficulty in dealing with people's personal issues, but as a manager and executive it's part of your job to confront life's little messes. You don't have to be Abigail Van Buren or Ann Landers, but you should know how to tactfully handle conflicts with customers and colleagues. And while you may have the best intentions with the

young manager who constantly seeks your advice, you're not rising to the challenge by passing the buck to HR.

### 55-75: The Perfect Boss

Your colleagues and direct reports surely find you approachable and responsive. Just be careful you don't go overboard. Being emotionally intelligent doesn't mean you have to be Oprah, doling out advice and commiserating over every drama or crisis. It means recognizing how people's emotions affect them, understanding why they feel a certain way and harnessing those emotions for the benefit of the organization.

## Scoring the Quiz

### 0-24: Emotional Dunce

Congratulations, you're about as emotionally intelligent as a milk carton and as approachable as a Komodo dragon. You confront people in the wrong way about the wrong things at the wrong times (for example, publicly accusing someone of taking credit for your ideas) and fail to confront them on the appropriate things (like racist jokes). Your haste to kiss off colleagues and

## Answer Key

|   |              |              |              |              |
|---|--------------|--------------|--------------|--------------|
| 1 | A. 0 points  | B. 5 points  | C. 0 points  | D. 10 points |
| 2 | A. 0 points  | B. 5 points  | C. 0 points  | D. 10 points |
| 3 | A. 0 points  | B. 5 points  | C. 5 points  | D. 5 points  |
| 4 | A. 5 points  | B. 0 points  | C. 10 points | D. 0 points  |
| 5 | A. 10 points | B. 0 points  | C. 0 points  | D. 0 points  |
| 6 | A. 1 point   | B. 10 points | C. 5 points  | D. 5 points  |
| 7 | A. 5 points  | B. 0 points  | C. 0 points  | D. 10 points |
| 8 | A. 1 point   | B. 10 points | C. 0 points  | D. 0 points  |

**8** One of your direct reports approaches you with a personal problem: His elderly parent needs care and possibly placement in a nursing home. What do you do?

- A** Tell him that you're sorry and that he can come to you for advice or to commiserate anytime.
- B** Acknowledge that family problems often take a toll, and ask him to be open with you if he's having trouble



Getting to know your staff as individuals, and developing a sensitivity to their needs and how they fit into a larger organization, can help you figure out **what to do when critical situations happen.** And they will.

## E.I. in Action

**HUGHES, THE CIO OF GE COMMERCIAL Distribution Finance,** believes his staff member felt comfortable approaching him about her divorce because he takes time to regularly chat with employees about their work and their lives. By getting to know their staff, he says, CIOs can better sense when employees' performance is not up to snuff and can take action to help them.

Hughes also uses E.I. to deal with organizational change. Before the company was a unit of GE, it was called Deutsche Financial Services. When DFS was put up for sale three years ago, employees grew uncertain about their fate and that of the company. They debated whether to jump ship of their own volition or wait to be shown the door. To keep the company attractive to potential buyers, DFS had to look stable, and that meant keeping employee turnover low. Hughes used his E.I. capabilities to read which executives were receptive to the sale and who would be willing to help him motivate people to stay on the job. He also identified which people didn't support the sale (and therefore who wouldn't be worth his effort to convert).

"In a way, it's ruthless," says Hughes of his approach, "but it allowed me to cut my losses by not spending time on people who wouldn't make the transition and who wouldn't help me gather those on a team to move forward and get the sale done."

The end result of Hughes' E.I. savvy was that his department has had less than 5 per-

cent attrition over the past five years. "Keeping a team together through that three year period was not easy. You really need to be in tune with people," he says.

## Learning E.I.

**IF, UNLIKE HUGHES, MANAGING WITH** emotional intelligence doesn't come naturally, you can take steps to improve. The first step is to assess your current E.I. capacity by taking a test, administered by a professional, that measures your ability to perceive, understand and manage your own and others' emotions.

When you determine your current level of E.I., set a clear goal for yourself. Your goal should be positive, specific and measurable, says Rutgers' Cherniss. For instance, if you find you're too critical of others, an example of an effective goal to set for yourself is, "Over the next month, I'm going to be more open-minded in meetings. I'll let participants complete their thoughts, and I'll acknowledge their contributions rather than dismiss their comments." If you wish to be more empathetic, your goal might be to try to understand what people are feeling, and during the next month when they make statements in meetings, check your understanding of what they're feeling by stating in your own words what you think they're communicating. You might even add that you're going to do this two or three times during each meeting, says Cherniss.

Since you're going to slip up from time to time, The Wenroth Group's Rothman advises you to build rituals throughout your day that will give you the opportunity to exercise your E.I., like visiting employees to ask how they are doing, or asking another executive about your effectiveness as a manager. Rothman also recommends keeping a checklist against

which you can measure whether you're achieving the goals you've set.

Another strategy for increasing your E.I. is called behavior modeling. In behavior modeling, E.I. trainees are shown a recording of, say, an executive skillfully telling her employees about an imminent layoff. The trainees watch the video several times and try to identify a few points that made the executive's speech effective. Then the trainees each get a chance to emulate the model and give each other detailed feedback. They rehearse the skit until they master it. Then they apply what they've learned from the exercise in the real world.

Cherniss and Rothman also suggest having a coach who can give you feedback on your efforts to improve your E.I. Your coach can be a colleague or an organizational psychologist. "The positive feedback [you receive] reinforces you wanting to improve more and more," says Rothman.

Emotional intelligence by itself doesn't guarantee success, of course. But in the toughest business circumstances, staying attuned to others' feelings and motivations can help a manager move her staff forward.

Robert Falconer, technology director at 415, a San Francisco-based Web design firm he joined in 1999, saw his staff dwindle from a peak of 22 during the dotcom boom to just three now.

In bruising times such as layoffs, it's vital to reach out, says Falconer, 37. Checking in with people, is "not a matter of prying," he says. "It's being involved and concerned about people. If there are things I can do to help them on a project or outside a project, I want to know. If you're a happy employee, you do better work." **CIO**

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# Hot Seat

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[hotseat@cio.com](mailto:hotseat@cio.com).

## Survivor

*A change at the top can spell trouble for a CIO's job security.  
Here's how to stay when your CEO goes.*

BY DAVID T. GORDON

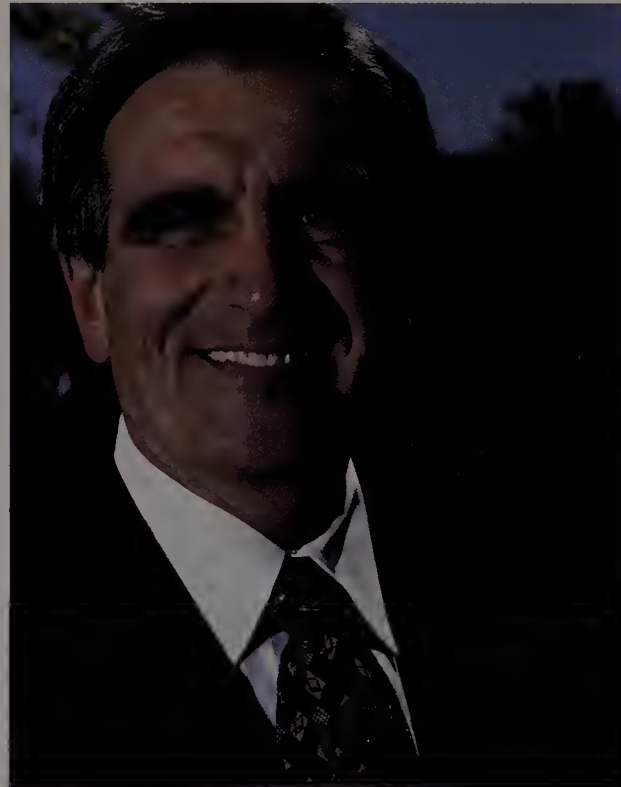
Back in the boom days, CIOs were like players in a corporate game of *Who Wants to Be a Millionaire?* playing with big IT budgets for a slew of enterprisewide projects. Today, with spending locked down and empty cubicles surrounding the remaining IT staffers, the game may feel more like *Survivor*, a test of deprivation and endurance through a bear-economy obstacle course. So what happens when your corporate sponsor—the CEO or other executive who brought you on board and signed off on your major projects—gets voted off the island by an antsy board? What happens to your projects, your employees...and you? Here is the hard-won advice of a few CIOs who've been there.

### Don't Forget Your Customers

The game of CIO survival can be won or lost before a high-level chair-shuffling ever takes place, says Malcolm Fields, vice president and CIO of Hon Industries, an office furniture maker based in Muscatine, Iowa. Fields successfully steered his IS team through a major transition two years ago when the executive who signed off on an advance planning and scheduling package left just before implementation. When the dust cleared, Fields had to sell the project to a pair of new company presidents as Hon Industries was split into two business units.

Some of Fields' biggest allies turned out to be his customers, those business-unit leaders across the company who could vouch for the work IT was doing to help solve problems. "If you spend all your time marketing yourself to one person—the CEO, CFO or whoever—then you lose all the equity you've developed

in one fell swoop when that person leaves," he says. Instead, help executives in logistics, manufacturing and customer relations "understand exactly how your IT organization empowers them and their departments to move forward," says Fields. "Not only do you cover your rear, but cultivating those relationships



**By the third month of a new CEO's tenure, CIOs can tell whether they should stay or go, says CIO-for-hire Charlie Feld.**

makes you a more effective CIO because you better understand what your customers need." What's more, any one of those executives could become the next CEO—your new boss.

A broad base of support for the IS group's work is bound to impress a new CEO, says Charlie Feld, founder, CEO and president of The Feld Group, an Irving, Texas-based IT consultancy. "Those relationships are important because they show your work is not done in a vac-

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# Hot Seat

uum. You've developed a joint agenda with the business units, and your work is focused on moving the business forward."

## Don't Forget Your People

As a leader, you have the job of keeping your staff attuned to business needs. When those needs change, IT workers need to be asking themselves questions like, What are we trying to accomplish in the new regime? and How will that change the customer experience? The Feld Group had been running Burlington Northern's IT organization for a year and half when the company merged with another giant railroad, Santa Fe, in 1995. Feld says he moved quickly to end any talk in the IT ranks about which railroad's technology system was better. The only question he allowed on the table at meetings was, What will work best for the new company? "Each company had its own systems footprint, culture and business model," he says, "but we didn't worry about what the old models looked like because those old companies were gone."

During a merger, in particular, people's fear of mass layoffs are heightened. Although you can't make those uncertainties disappear, you can make sure the IT group puts its best foot forward by getting them focused on the new needs of the business. "The more people are tuned in to the business model, the better they'll adapt to change," says Feld. "The more they're tied in to the technology—if they insist on being Java people or whatever—then the more they will be resistant to change."

## Don't Forget Who's Boss

Doug Barker unexpectedly found himself working under new leadership at the Nature Conservancy when the former CEO died suddenly in May 2000. Barker didn't see eye-to-eye with the successor CEO and recently left his post as CIO. In

hindsight, he advises CIOs who are beginning work under a new regime to think of themselves as outside consultants. "Be objective. Look at the strategic agenda from the highest level on down, and try to paint an accurate picture of your organization," he says.

Your past accomplishments probably won't interest your new boss, so don't focus on those, Barker says. Instead, identify what the problems are and what remains to be done. That will give the CEO confidence that you understand the

run the business and to shape your organization accordingly. "IT should always support the business agenda," says Feld. "That means being open to where the new CEO wants to take a business."

In times of transition, it may be tempting to overstate your own importance to the organization and to tout yourself as indispensable. That's a mistake, says Fields. "I've seen a lot of IT professionals try to hold their business hostage by convincing [a new boss] that things would fall apart without them. That shouldn't be the

## TRANSITION TIPS

# Eight Ways to Prep for a Job Hunt

Even if you're not planning on going into the job market, be prepared for it, says Beverly Lieberman, president of IT recruiting firm Halbrecht Lieberman Associates in Stamford, Conn. Otherwise you could find a comeback very hard. Her tips:

1. Develop a strong network of friends and colleagues who can give you employment leads and ideas. Get the names of the top five recruiters they've worked with.
2. Plan to spend eight to 10 hours a day networking. Legitimate opportunities will take three times as long to locate as they did two years ago.
3. Join a professional association and get involved. They're great for networking.
4. Find a way to present a white paper at a university or a conference. It may help separate you from the pack.
5. Spend the time and money to get a top-notch résumé together.
6. Contact an outplacement service for advice.
7. Hire a professional coach to help you take stock of your psychological and physical health. Make a get-well plan. Get in shape.
8. Make absolutely sure your finances are sound.

—D.G.

business issues facing the company and can provide insights into how technology can help address those concerns.

Another key to survival is to not be defensive or inflexible when a new boss arrives, says Feld, who was CIO at Frito-Lay from 1980 to 1992, a period when the company changed CEOs six times. Remember: The CEO gets to set the agenda, Feld says. Your job as CIO is to determine how this newcomer wants to

point," he says. Instead, straightforwardly explain the projects you're working on and their underlying rationale.

As you think about the substance of conversations with a new CEO, you should also consider the style or format for such a conversation, says Beverly Lieberman, president of the Stamford, Conn.-based IT recruiting firm Halbrecht Lieberman Associates and author of CIO.com's Executive Career Counselor

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column. How does the new boss like to get his information? In 15-minute PowerPoint presentations? Is he a voracious reader

of memos and reports? Does he like discussions over a cup of coffee? Find out how tech-savvy he is, Lieberman says. Has this person ever had a CIO or IT person report to him?

## If You Have to Go

Even if you do all the right things, you may still find yourself out the door. A new boss might want to install new faces to signal that things are going to be different. "We all tend to think of our status and the security of our positions as based on the sum of our accomplishments. But, of course, a new CEO means a brand-new day," says Barker. "What you've done is yesterday's news. Even at top levels of executive management, your survival is, to some degree, out of your hands."

What are some signs that a new CEO is going to want to work with you—or not? Look at whether your boss is willing to spend time on IT, says Feld. The first weeks after a transition will probably be devoted to financial matters and business operations. But by the second month, the CEO should want to spend time learning your part of the business and how it fits in. "You can usually tell by the end of the third month if this is going to work," says Feld. "If there's dialogue, there's hope. If not, you can't move forward with your agenda. If you can't get on [the CEO's] calendar, it probably means you're not going to be a component of the company's success."

Still, unless you're pushed out, think carefully before wading into the current job market, says recruiter Lieberman. "This is not a time to be impulsive," she says. "Your company may not be in good straits, your relationship with your boss may not be the most positive one, but if it's tolerable and you can still make posi-

## MANAGEMENT REPORTS Exec Disconnect

### Why CIOs can't talk with their CEO

CIOs long chafed under the miserly rule of the chief financial officer. So when this magazine's 2002 "State of the CIO" survey found that a slim majority of CIOs now report to their CEO instead, it was good news. Or was it? According to another report, many CIOs are chafing under the uninformed rule of CEOs.

Nearly a quarter of CIOs believe their CEO is incapable of making an informed and fair assessment of their performance, according to the results of "The CIO on the CEO," a survey of 200 CIOs conducted last spring by John J. Davis & Associates, a New York City-based executive search firm specializing in IT. Eight percent of respondents described their CEO's understanding of IT as completely inadequate, and 16 percent said it was barely adequate.

So do those results mean the remaining 76 percent of CEOs are reading up on IT in their spare time? Not exactly.

The survey's respondents painted a fairly bleak picture of the state of CIO-CEO relations:

- Forty-eight percent of the CIOs said their CEO usually or sometimes has unrealistic expectations of what IT can accomplish.

- Thirty-five percent said their CEO is not supportive or only somewhat supportive of their work and the IT function.

Part of this parlous state is due to the current recession, says John J.

Davis, president of the search firm. In search of reduced costs, CEOs are alighting on IT. "It seems IT has taken the biggest brunt of the down times. I've been in this business a long time and never seen it this bad," he says.

Even so, Davis believes the root causes of the CIO-CEO disconnect are unrelated to economic ups and downs. He points to a generational lag among CEOs, who tend to have entered the workforce before IT became a driver in corporate strategies. The second and more important underlying cause, he says, is CEOs lack of education about the value and uses of IT.



The blame for such ignorance must be laid at the feet of CIOs as well as their boss, Davis believes. "It could be that you, Mr. CIO, aren't properly articulating the value of IT. The CEO is focused on a lot of things besides IT. If the CIO hasn't been doing a good job on education all along, it's not surprising that the CEO doesn't understand [IT]," he says. Conversely, some hands-on training might convert CEOs from powerful-but-inept users into power users. —Edward Prewitt





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tive contributions and build your résumé—if you're not in extreme pain—then stay put." Lieberman says she's taken up to two years

to place CIOs in new positions.

After leaving his post, Barker teamed with another IT executive to start Barker & Scott Consulting in Washington, D.C., which works with nonprofits such as the U.S. Fund for Unicef to align their IT practices and strategic goals. As one might expect, he terms the transition "fun and interesting," a time to "try new things on for size" and get a broader perspective of the field. "As CIO, you're so focused on what the organization is doing, you can lose perspective," Barker says. "I'm rehoneing all kinds of skills."

**"If you spend all your time marketing yourself to one person—the CEO, CFO or whoever—then you lose all the equity you've developed in one fell swoop when that person leaves."**

—Malcolm Fields, VP and CIO, Hon Industries

He needs no refresher in survival skills, however. If and when Barker returns to the CIO ranks, one of the first actions he plans to take is to create an exit strategy. "Early in the position, CIOs should know what they want to accomplish in the job," he says. "That makes it a lot easier when it's time to move on." **CIO**

Can CIOs create a power base independent of the CEO? Should they try? Let us know at [hotseat@cio.com](mailto:hotseat@cio.com). Freelance writer David T. Gordon can be reached at [dgordon@massmed.org](mailto:dgordon@massmed.org).

## Leadership Agenda BY SUSAN H. CRAMM

# Is This Job All There Is?

*How to uncover your career destination*



What are your career goals? That's the first question I ask my prospective coaching clients—and one very few people can answer. It's ironic that most of us spend too much time working toward goals we cannot specify.

When we are just starting out in our career, things are pretty easy. Most everyone is glad to have a job, and most any assignment is challenging and instructive. Employees

interpret the tangible signs of progress (for instance, moving from a cubicle to an office, changing titles) as signals that they are on the right track. Promotions happen frequently. People don't know their ultimate destination, but it really doesn't matter—they have more energy than wisdom, they have no one waiting at home, and they are moving in the right direction on a long trip with plenty of chances to change course along the way.

As we get a little older, the realization sets in: *This is why they call it work.* Promotions become less frequent, relationships (and their ugly brother, politics) increase in importance, pressure and expectations escalate both at work and at home, and wisdom overtakes energy. All those forces cause us to ruminate on the age-old question, Is this all there is?

That's often the point at which people call me for some executive coaching. They are concerned about their future. Sometimes something about their job doesn't feel right, and they can't exactly pinpoint what it is.

Our first task together is to discover their career destination. Once people understand their career goals, they can make sense out of the working world around them. They can move to determining how their current position and employer can help them build the skills they need for the future. Instead of focusing on external signs of progress such as title, status and money, I help clients focus internally—on targeting, assessing and acquiring the skills they need to get to their career destination.

### THE WHY OF A CAREER DESTINATION...

If you are interested in helping yourself or others through this discovery process, let's review some important principles. First, the career destination is a five-year guess about your future job—a hypothesis, if you will. It's the best you can do with current information. As you start making specific moves toward this goal, you will gain more insights about yourself, which might even lead you to change your career destination. For example, a help desk manager wanted to become a CIO and knew that he needed to develop his business analysis skills. He was given the opportunity to work in business planning, only to discover that the assignment did not play to his strengths. He moved



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# Hot Seat

back into IT and revised his career destination.

Second, your career destination should reflect all of

your dreams—personal as well as professional. One of my clients married an older man who was within five years of retirement. She needed a position with a flexible calendar so that they could share his golden years.

Third, the career destination you discern might not fit within the boundaries of your existing company. There is probably plenty of skill-building that can occur where you are now, however.

For example, one client told me that his long-term interest was to start up and run a koi pond business. To be sure, it was a stretch from his position as IT director. Together we quickly identified the business planning, marketing and operations skills he needed to acquire, and then we pinpointed the development opportunities available at his current company.

## ...AND THE HOW

Now let's review the process of discovering a career destination. It's a good idea to select someone to help you through it—someone who asks good questions and can help you think clearly. This person may not agree with your career choice, but that's OK—the facilitator's job is to make sure you examine the realities of your destination (in terms of the skills required, degree of difficulty and level of risk), not to edit or approve your thinking.

I find that the coaching process takes five meetings of an hour and a half each, on average, during a four-week period. At the first meeting, I outline the career destination discovery process. I ask clients for their résumés and copies of their performance evaluations and 360-degree assessments.

I also assign homework: Clients should describe their ideal job. To assist people with that task, British Airways has used a visioning instrument that asks the following questions:

- What are you doing five years from now?
- What are you wearing then?
- What are you driving then?
- How long is your commute?
- Where are you living then?
- Who helped you along the way?
- Did you need to go back to school to get there?

During the second meeting, I ask about job history, delving into performance assessments to make sure I understand clients' strengths and development opportunities. I examine their view of the ideal job, noting the

I press for specific positions (such as "I want to be a CIO at a medium-size manufacturing company in Colorado"). Once people have nailed down something that sounds right, we analyze the response: Which skills do they need to acquire, which of those skills could they build in their current position, what steps would move them closer to their goal, and who could assist them along the way?

During the fifth and final meeting, clients document their hypothesized career destination and then commit to specific actions that will bring that goal nearer. We schedule periodic follow-up meetings to check progress.

If you decide to undergo this process of choosing a tangible career destination and working out the things

When the little voice inside your head asks, "Is this all there is?" a bigger voice should answer, "No, because I have this idea, you see...."

specific words they use and asking clarifying questions.

At the third meeting, I discuss clients' accomplishments and disappointments and the things they gravitate toward and away from, with the goal of deepening my understanding of their skills, motivators and barriers. I ask what jobs they are interested in exploring (in or out of their current company). For homework, we both reflect on the "fit" of the potential jobs they've identified with their strengths, weaknesses, likes and dislikes.

At the fourth meeting, I ask clients to answer the question, What position will you hold in five years? The responses are usually generic at the start ("I want to be a vice president," for instance), so

you need to do to get there, then you're on the way to becoming fully accountable for your career. You'll find that you're no longer waiting for someone to move you to the next position. Instead, you will almost unconsciously identify and pursue opportunities that will help you achieve your goals. And when the little voice inside your head asks, "Is this all there is?" a bigger voice should answer, "No, because I have this idea, you see...." **CIO**

Susan H. Cramm, a former CIO at Taco Bell and former CFO at the Chevys restaurant chain, is president of Valuedance, an executive coaching firm based in San Clemente, Calif. Her e-mail address is [scramm@cox.net](mailto:scramm@cox.net). See her previous columns at [www.cio.com/leadership/agenda.html](http://www.cio.com/leadership/agenda.html).



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## Inside

**Under Development**  
*Keeping cool . . . . 100*

**Company to Watch**  
*GoldenGate . . . . 102*



### CASE STUDY EARLY ADOPTER

## Getting Ready for Web Services

*Winterthur Insurance's Internet-era experiments produce a low-cost application platform* BY GALEN GRUMAN

*Edited by Christopher Lindquist. Send your thoughts and ideas for future columns to clindquist@cio.com.*

**SWITZERLAND'S** Winterthur Insurance and Life & Pension knew in 1997 that it needed to replace its IBM OS/390-based application platform for new applications and some existing ones. Universities had stopped teaching the system, therefore making it increasingly expensive

to hire development and maintenance staff. But what to replace it all with?

At the time, the IT industry was focused on Internet technologies—unproven and novel as they were—which led Winterthur's Credit Suisse Group subsidiary to look into the available

Web services...Cooling power...Fast sync



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Director of IT for Electronic  
Commerce Development  
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## CASE STUDY COMPANY INFO

## Winterthur Insurance and Life & Pension

**Headquarters** Zurich, Switzerland

**Project** Create new application development platform that simplifies secure legacy integration and provides a path to Web services

**Objectives** Cost savings, desire to create common application development for various business units

**Technology used** Corba applications platform, Java, C++, IBM MQSeries, Oracle, IBM DB2, Sun Solaris servers and Windows NT workstations

**Products purchased** Iona Technologies' Orbix E2A Web Services Integration and Application Server Platform, New Atlanta Communications' ServletExec, IBM MQSeries

**Project started** June 1997

**Project completed** First test application in mid-1998. Completed platform in mid-1999. Has developed about 30 applications to it since then.

**Total cost** NA; (as much as \$100 million, according to one analyst)

**Actual ROI** Estimated at 15 percent to 20 percent per year

**Primary benefits** Reduced development and maintenance costs; easier application integration; ability to offload some back-end operations to clients and brokers; ability to develop a common security model; prepared company infrastructure for Web services

**Unexpected hurdles** Core Corba and Java technologies were not capable in early versions, security insufficiently strong for Web services deployment

**Commentary** "The platform is one of the most successful pan-European initiatives in the Insurance and Life & Pension divisions. There is a huge chance for us to bring together our vast pool of IT resources in the various market units and start thinking about intelligent ways to use those resources across the borders of the market units."

—CIO Martin Frick

tools. That investigation revealed that Java and other standards-based technologies could best support the development of new applications—and offered the potential to make those applications more easily accessible outside headquarters to other Winterthur offices, insurance and pension brokers, and client companies. As a result, Winterthur began developing Web services "before Web services was even conceived," says Massimo Pezzini, vice president and research director of application integration and middleware strategies for Stamford, Conn.-based Gartner.

Today, Winterthur has standardized its Swiss operations on its new platform and is rolling it out globally. Like modern Web services, the platform's application infrastructure relies heavily on reusable application components connected through a standard messaging and interface platform.

## Winterthur had to do much of the heavy lifting that standard platforms built around Microsoft's .Net and Sun's Java provide today.

The difference is that Winterthur had to do much of the heavy lifting that standard platforms built around Microsoft's .Net and Sun's Java provide today because those technologies inevitably need to integrate into the existing environment.

Despite the hurdles, Winterthur's Swiss division has ported 30 applications, and more are on the way in divisions throughout Europe. Client-oriented applications include online quotation, risk management assessment, claims reporting and customer data updating, while internal users can access applications for data warehouse-based marketing campaign management, financial analysis and reporting, and health insurance bill processing and verification. Java supports the application environment, and the Object Management Group's common object request broker architecture (Corba) provides the communications method.

## Building Blocks

Winterthur had used its existing IBM OS/390 platform and other IBM hardware for years. "But it was not scalable. It was complex, not easily distributed and required too much logic on the client side," says Eric Aumont, the engineering vice president who led the new platform development. To resolve those issues, the IT staff looked at Corba to be the exchange mechanism between its OS/390, database, content management and ERP systems with Java-based clients. "But Corba was too risky in 1997," Aumont says, since the standard was still evolving and did not yet support the PL/I mainframe programming language.

By mid-1998, however, Winterthur had settled on a mix of a now-improved Corba, client-side Java and server-side C++. "Java was not scalable enough from the server

side," Aumont says, so Winterthur needed Corba as "a message broker to coordinate all these things." Being an IBM shop, Winterthur considered IBM's Object Broker as well, but it was not yet production-ready, so Winterthur chose the available alternative, Iona's Corba platform. In the fall, Aumont's team of five had ported the first application—one that let client HR departments directly manage changes to pension plans—to the new platform.

But that port was "on an easy platform—three or four machines," Aumont recalls. And Winterthur still couldn't rely on Corba to connect clients to a mainframe. Winterthur and its vendors had to work hard to make the technologies work together reliably, recalls Aumont and Iona Technologies CTO Eric Newcomer.

Those efforts let Winterthur get serious about implementing the Java and Corba technologies broadly in the organization.

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The ability to broker messages from OS/390 applications meant that Winterthur could have all its applications—new and legacy—connected through the Iona platform. That was the key for the company to ultimately be able to offer its service-oriented architecture.

Winterthur will eventually replace many of its OS/390-based Cobol and PL/I applications. In fact, such a migration was a big focus in 2002, with three applications ported in Switzerland that year. The migration team has also grown, from the five in 1997 to about 30 today.

Throughout the migration effort, the team reused the business logic from 30 years of OS/390 applications. Ironically,

resources, load balancing and response time,” Aumont recalls. Also at first, platform provider Iona’s EJB tools were incompatible with C++, “so we had a parallel operation of Java with EJB and C++ on the server side,” says Aumont. In the end, Winterthur’s Corba-Java combination resulted in a “very complex architecture,” notes analyst Pezzini, one that today could be avoided with a pure Java or wholly Microsoft .Net approach.

### Big Investment

Although a company starting today could bypass some of the early adopter expenses Winterthur faced, the price for such a move remains steep. Although neither

existing assets and to be able to deploy projects based on more modern technologies is key to us,” says Winterthur CIO Martin Frick.

“It makes sense to develop one application for all market units to rationalize IT operations,” adds Lisetto. “This reduces the cost of deploying common applications and brings all information to the front office [at brokers, internal departments and clients].”

### The Transition

Now Winterthur is eyeing the next step: modern Web services based on today’s standards, which would let even more customers, brokers and staff connect to its systems. That would increase self-service opportunities that in turn could save Winterthur money and speed up processing. And Winterthur’s transition to modern Web services will be relatively easy, says Gartner’s Pezzini, because the company has already divided application logic from presentation and connectivity.

A few more steps remain, however. The current platform requires client software and thus restricts usage to those connected to the Winterthur network. Users must also access applications separately. At some point, however, Aumont says he hopes to deploy a portal to provide single-point access to many applications. And by the end of the year, he plans to integrate the platform applications with enterprise applications such as SAP.

Still, many implementation challenges remain, Aumont says. “The biggest challenge is security,” including authentication and authorization, he notes. “You need to spend 15 percent of your time on security in an integration effort. We need standards to reduce that.” Winterthur’s current platform integrates different security models and propagates the informa-

## While beginning early let Winterthur get the service platform running before many of its competitors, that fast start also created a complex technology legacy.

the new services platform helps extend the life of the mainframe, says Gartner’s Pezzini, since it makes the mainframe’s applications and business logic reusable just like any other platform component.

### Java Lab

Because Winterthur started its effort in 1997, it had to test and help vendors fix technologies still under development. “It was essentially a laboratory to architect Java and the Internet,” recalls Aumont.

While beginning early let Winterthur get the service platform running before many of its competitors, that fast start also created a complex technology legacy that companies today could avoid. For example, in early 2000, Winterthur’s engineers were exploring enterprise Java beans (EJB) to manage components and provide standard services such as security in enterprise-class applications. But EJB resulted in “lots of problems with distributed storage, security, scalability, failover,

Winterthur nor Iona would discuss costs, Pezzini says similar efforts by European financial services companies cost around \$100 million. And while the operational savings and increased revenue from being able to sell new products more quickly will eventually pay back that investment, such an up-front cost “requires business management commitment, to say the least,” Pezzini says.

For its part, Winterthur didn’t approach the project with a specific ROI, although Daniel Lisetto, Winterthur’s e-Platform Solutions Centre vice president, estimates an ROI of 15 percent to 20 percent per year, which Pezzini calls reasonable for an early adopter. When it started the effort in 1997, Winterthur simply believed the architectural approach would allow faster deployment of new applications, which is key in an industry such as financial services where companies succeed by quickly repackaging products into new variations, says Pezzini. “The ability to reuse the

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tion among various systems, Aumont says. But for Web services, he wants a single security model. Unfortunately, such a security standard doesn't exist yet, so he plans to deploy Web services slowly, perhaps implementing limited services as appropriate security components become available.

## Belief in the Model

Winterthur believes the platform provides a key competitive advantage: agility. "Winterthur can change business practices faster than other competitors in the market," Lisetto says. "We can convert different services as needed for business reasons." Aumont concurs: In the Swiss unit, "we now have 30 applications based on the same infrastructure, the same frameworks, the same security." Under the new platform, "when you have to maintain it, it's easy. In the traditional model, you have to change every application. It's not very economical," he says. For example, adding a new type of insurance option previously required updates to each insurance application. Under the new platform, only the insurance business-logic and forms-presentation modules need to be changed.

For CIO Frick, the new platform is a major vehicle for Winterthur's IT efforts going forward. "The platform is one of the most successful pan-European initiatives in the Insurance and Life & Pension divisions. There is a huge chance for us to bring together our vast pool of IT resources in the various market units and start thinking about intelligent ways to use those resources across the borders of the market units. Too long we have reinvented wheels in parallel with no, or only little, synchronization between various countries."

With the common platform and its service architecture in place, Winterthur expects to use those resources to better compete in a Web-oriented world. ■

Freelance writer Galen Gruman can be contacted at [ggruman@zangogroup.com](mailto:ggruman@zangogroup.com).



## UNDER DEVELOPMENT

### Cool running

# Low-Heat Laptops

**YOU WON'T BE ABLE TO** use your laptop as a portable coffee warmer anymore, if technology from Sandia National Laboratories goes mainstream.

The lab has created a technique that could replace the standard, functional, but not terribly efficient, metal heat sinks currently used to extract damaging warmth from computer chips. While the sinks do their job of protecting the computer, much of the heat ends up dispersed into the local surroundings—most likely the users desk, or worse, their lap. And those small fans whirring away inside laptop housings just don't do much to boost the comfort level.

The Sandia technology uses small (less than hair-thickness) copper "wicks" to transport methanol—and waste heat—from one area of a computer to another, where it can be dispersed more efficiently, comfortably and compactly than with heat sinks. According to Sandia, the technique has another advantage as well—it will allow for even hotter chips, meaning faster processors and more dense designs. Of interest to the military (to whom small moving parts are a potentially life-threatening annoyance), the system can even work without a fan, dispersing the piped heat instead through cooling fins as the methanol condenses from hot vapor to cool liquid and begins its return trip to the processor.

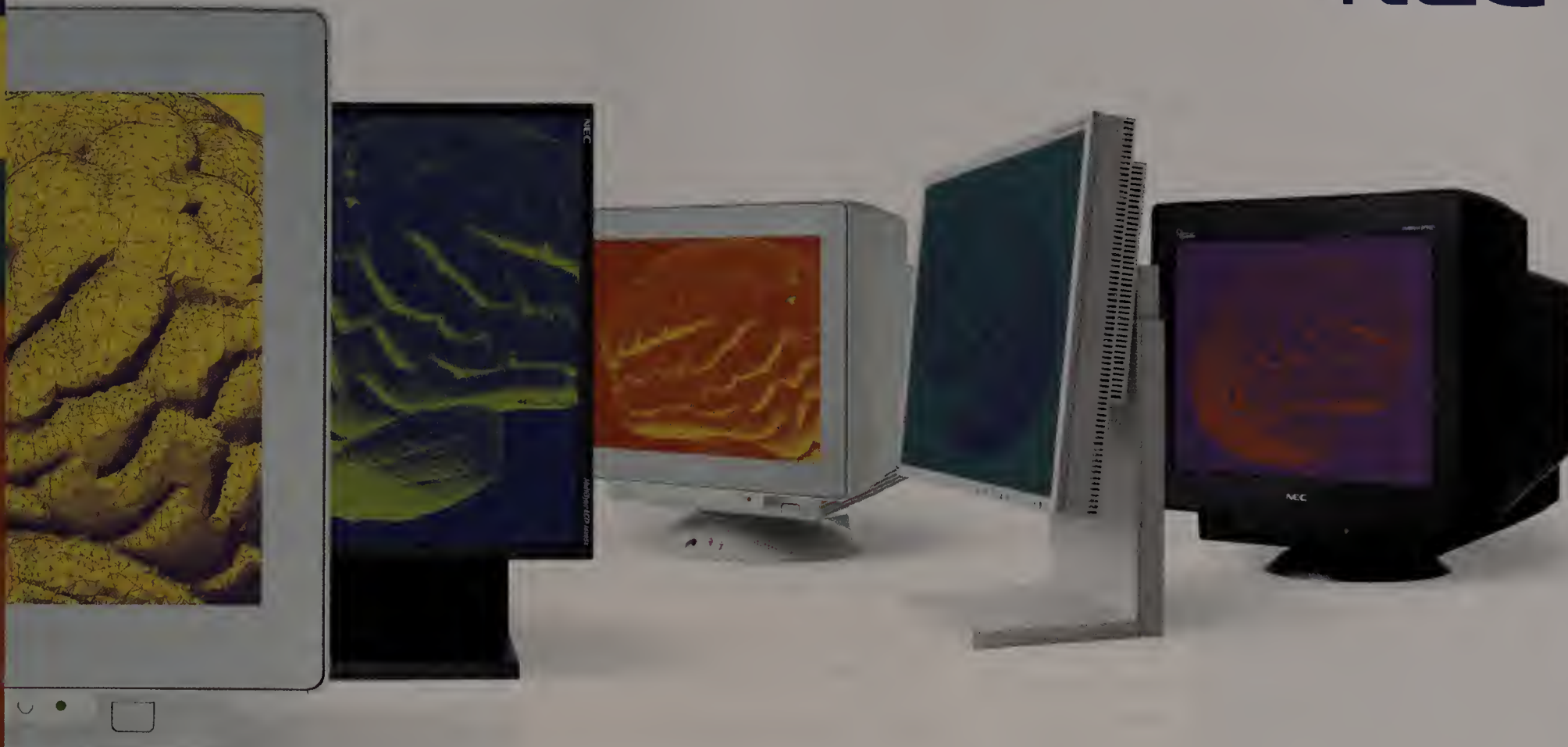
Making use of the technology will require minimal design work on the part of computer makers, according to the lab. Sandia has intentionally created the system to fit inside the existing form factor already in use by standard heat-sink cooling. In the future, however, the web of hair-thick pipes could be directed in any direction the manufacturer deems most appropriate.

As of this writing, Sandia was in the process of licensing the technology to a startup company that plans to market products to the consumer laptop space. No release date has been announced, but when it comes, we may all be a little cooler.

—Christopher Lindquist



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## COMPANY TO WATCH

## GoldenGate

# Always Up to Date

*GoldenGate looks to keep everyone's data in sync*

BY SARAH JOHNSON

**MIKE SEASHOLS ADMITS** he had never even heard of Sausalito, Calif.-based GoldenGate, which specializes in data synchronization, before he was called in for a job interview. Five months later, as the private company's president and CEO, he's spreading the word about the 7-year-old vendor that's been hiding under the radar while acquiring well-known customers such as AOL Time Warner, Bank of America, Dell, Merrill Lynch and Visa.

For the first time, GoldenGate is marketing its Global Data Synchronization platform, which has been integrated for seven years with other vendors' data management applications.

GoldenGate has begun the new evangelism by letting its existing customers—who may not even realize that GoldenGate software is part of their system—know how they can take further advantage of its product, which captures and quickly transfers data among various systems, data warehouses and applications.

If a Wall Street bank has computers damaged by fire, for example, GoldenGate's software could have already synchronized the latest data, moving it from, say, systems in New York to another office—perhaps in the Midwest—for easy access with no disruption.

Beyond disaster recovery, the platform can also help companies keep systems running during upgrades—all with no downtime and no errors, GoldenGate says.

That claim led Bank of America to GoldenGate about four years ago when it needed to upgrade its ATM infrastructure. BofA's 14,000 ATMs handle transactions for some three million customers—cus-

## GoldenGate

**Headquarters** Sausalito, Calif.

**Founded** 1995

**Employees** Approximately 100

**Revenue** \$10 million in sales in Q3 of 2002

**Product** Global Data Synchronization platform

**Reason to watch** With Global 2000 customers under its belt, GoldenGate is starting to make its name known in the data market

**Hurdles** Achieving brand recognition; gaining ground over its competitors by expanding services

**Website** [www.goldengate.com](http://www.goldengate.com)

tomers who don't want to see "out of order" messages or errors. During the upgrade, GoldenGate's Global Data Synchronization platform kept all parts of the system in sync, allowing the bank to keep things running even as the changes occurred. That's important for the Charlotte, N.C.-based bank because on peak days it handles as many as 300 transactions per second, according to GoldenGate. And errors could be costly, both in dollars and customer goodwill.

There are other products on the market that make claims similar to GoldenGate, but Bank of America was attracted to the product because of its capability to replicate data to heterogeneous systems as well as its support for disaster recovery. The GoldenGate implementation, including training and testing, took about 30 days, says Michele Schwappach, vice president and senior systems manager for the bank.

Despite happy customers, GoldenGate does face some challenges, according to analysts, such as getting the brand recognition it now craves as well as convincing potential customers that its software is more than just fast. Achieving those goals will take significant effort, as the company is competing both with the bigwigs and other small players. Fortunately for GoldenGate, most of the big vendors (such as Oracle) usually limit their data synchronization efforts to meshing with only their own products. Smaller companies, such as Informatica and Teradata, however, may offer more of a challenge. Of the smaller vendors, the first with a true data integration platform will probably be the winner, says Steve Hendrick, group vice president for application development and deployment at Framingham, Mass.-based IDC (a sister company to CIO's publisher). As yet, however, a leader hasn't stepped forward, although analysts say Ascential Software with its Enterprise Integration Suite is getting close.

That doesn't mean GoldenGate is stuck at the gate, however. It works on heterogeneous networks, says Laurie Orlov, research director at Cambridge, Mass.-based Forrester Research. "Their ability to cross platform boundaries makes them very valuable," she says.

And Seashols acknowledges that the company is not standing still, noting that GoldenGate is looking into expanding its services, including partnering with better-known vendors and marketing how its software can be used with other enterprise applications such as CRM and with tools for business analytics and business intelligence.

GoldenGate's strategy has been smart so far. Last fall, it saw its 29th consecutive quarter of profitability, earning \$10 million in sales. "It's clear that in the replication and synchronization space they have a well-respected product," IDC's Hendrick notes, "because you can't get the revenue figures they have without having a successful product." **CIO**



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# THE COMPLETE CIO

## AN AGENDA FOR PROFESSIONAL AND PERSONAL SUCCESS

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### SUNDAY, APRIL 27

8:00 am–1:30 pm  
**Golf Tournament**

3:00 pm–5:00 pm  
**Registration**

6:00 pm–8:00 pm  
**Registration, Welcome  
Reception & Golf Awards**

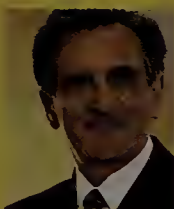
### MONDAY, APRIL 28

7:00 am–8:00 am  
**Networking Breakfast**

8:00 am–8:15 am  
**Welcome**  
**ABBIE LUNDBERG**,  
*Editor in Chief,*  
*CIO Magazine*  
**JONATHAN ZITTRAIN**, *Con-*  
*ference Moderator*  
*and Cofounder,*  
*The Berkman*  
*Center for Internet*  
*& Society, Harvard Law School*



8:15 am–9:15 am  
**The Complete CIO**  
**CHARLIE FELD**,  
*Founder, The Feld*  
*Group & Former*  
*CIO of First Data*  
*Resources, Delta*  
*Air Lines, Burling-*  
*ton Northern and*  
*Frito-Lay*

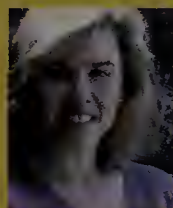


CIOs increasingly have more of a hand in defining and driving corporate business strategy. And everyone—business line managers, the executive management team, the CEO, the board of directors—has greater expecta-

tions of their CIO. What are the essential skills and attributes needed to thrive in the CIO role today? Charlie Feld talks about his own experiences over time as CIO of very diverse businesses, and what his client companies demand today.

9:15 am–9:40 am  
**2nd Annual State of the CIO  
Survey Results Highlights**

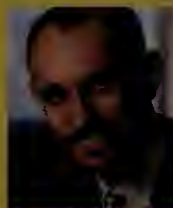
**LORRAINE COSGROVE**,  
*Research Editor,*  
*CIO Magazine*



This year's exclusive survey of over 500 IT chiefs reveals a very different set of challenges and a new set of priorities from a year ago. We share some of the highlights.

9:40 am–10:30 am  
**View from the Top:  
Creating Value  
Through IT**

**NIGEL MORRIS**,  
*Cofounder, Presi-*  
*dent & COO,*  
*Capital One Corp.*



Morris shares his viewpoint on the role of IT, and the criteria for measuring a CIO's ability to articulate and deliver true IT value to the enterprise.

10:30 am–11:00 am  
**Coffee Break and Sponsor  
Exhibits**

11:00 am–12:40 pm  
**Sponsor Briefings**

12:45 pm–2:15 pm  
**Networking Lunch**

2:30 pm–3:45 pm  
**Delivering Value: How to  
Manage Your IT Portfolio and  
Make a Strong Business Case**

**Participants:**  
**JACK KEEN**, *Coauthor, Making*  
*Technology Investments*  
*Profitable*

**HOWARD RUBIN**, *Vice*  
*President, META Group, Inc.*

In today's business environment, it's all about value. And it's up to the CIO to make sure that every IT investment delivers maximum returns. In this session, we'll explore how to build the portfolio that's right for your organization, how to manage it for greatest business benefit, and how to use it as an effective communications tool with your business partners. We'll also discuss how to make a compelling business case for new IT initiatives—even if your company is in cost-cutting mode.

3:45 pm–5:00 pm  
**The CIO Interview**  
**MONTE FORD**  
*Senior Vice Presi-*  
*dent & CIO, Amer-*  
*ican Airlines*



Ford took on the top IT spot at the world's biggest airline at the end of 2000, then had to deal with the acquisition and merger of TWA, the economic recession, Sabre selling its outsourcing business to EDS—and the events of 9/11. *CIO* magazine Editor in Chief Abbie Lundberg talks with Ford about his pivotal role in the organization and his plans for the future of IT.

5:00 pm–6:30 pm  
**CIO Peer-to-Peer  
Networking & Reception**

### TUESDAY, APRIL 29

7:00 am–8:00 am  
**Breakfast & Informal  
Discussion Roundtables**

8:00 am–8:45 am  
**What Every CIO Should  
Know About Digital Rights  
Management**  
**JONATHAN ZITTRAIN**

Entertainment companies aren't the only ones with digital content worth safekeeping. More companies now are realizing the potential threats and are seriously weighing the risks of not implementing digital rights management (DRM) technologies. Zittrain explores recent trends in DRM deployment and discusses the impact on businesses of all types.

8:45 am–9:45 am  
**Best Practices for Getting  
Outsourcing Right**

**Moderator:**  
**MARTHA HELLER**,  
*Director, CIO Best*  
*Practice Exchange*  
*& CIO Select*



Any CFO will tell you that the more you outsource the more you save. But as CIO, you know the pitfalls: lowered productivity, cultural conflicts, service level problems, to name only a few. This panel of CIOs, drawn from the CIO Best Practice Exchange, our online network of CIOs, will provide best practices



for determining what to outsource when, and how to sell the strategy to the board.

9:45 am–10:30 am  
**Becoming a Trusted Business Partner**

**JERI DUNN,**  
Senior Vice  
President & CIO,  
Tyson Foods, Inc.



The CIO's sphere of influence has never been larger. You must work with executive management and peers, internal and external customers, line of business directors, staff and vendors. You must set and achieve both strategic and tactical goals, articulate and demonstrate ROI, communicate and manage expectations. Dunn shares the benefit of her experience.

10:30 am —11:00 am  
**Coffee Break & Sponsor Exhibits**

11:00 am–12:40 pm  
**Sponsor Briefings**

12:45 pm–2:00 pm  
**Networking Lunch**

2:15 pm–3:30 pm  
**InFocus Workshop  
Breakout Sessions**

InFocus Workshops are designed to give conference attendees the opportunity to meet in smaller groups, and discuss specific topics and issues in greater detail.

**InFocus Workshop #1  
Building the Right Team: Your Success Depends On It**

**JUDY B. HOMER,**  
President, JB  
Homer Assoc.



Building the right IT team may not be an easy task—but as a CIO your success depends on it. In today's highly competitive technology talent market, what factors do you look for when you recruit and build your team that will contribute to realizing your goals? How can you become a more effective leader of your team? Executive recruiter Judy Homer provides you with tools to identify and overcome the obstacles in your path, and set the milestones for measuring your success. Workshop participants develop strategies and create a checklist for visualizing your goals and for building the team needed to support you in making them a reality.

**InFocus Workshop #2  
Meeting Your Goals: Where Executive Coaching Can Help**

**MICHAEL BRENNER,** Chief Resource, Brenner Executive Resources, Inc.



The biggest problems many CIOs face are with people, not with technology. The CIO needs to adapt to greatly different human interactions to handle the 360 degrees of interaction. You can't always be your own mentor. Executive coach Michael Brenner discusses the special challenges CIOs face and how to use executive coaching as a tool. The benefits can include having an objective sounding board, determining accountability, resolving conflict and maintaining work/life balance. He provides sources of executive coaches, tips on how to pick and work with one, and explores specific situations suggested by attendees.

**InFocus Workshop #3  
Plugging Business Case Leaks in the IT Value Pipe**

**JACK KEEN,** Coauthor, Making Technology Investments Profitable

A dependable business case is a vital management tool, not just to "get the money," but throughout the entire life cycle of a project, from the moment it is conceived, through proposing, selection, implementation and systems operations. Like many things in life, however, business case appearances can be deceiving—the majority are unintentionally inaccurate and incomplete, thus dangerously misleading in their recommendations to management. Keen shows us how to identify the likeliest weak links and fix them. He shares how to avoid missing benefits, missing intangibles and poorly supported calculations and reasoning.

**InFocus Workshop #4  
Effectively Marketing IT Internally**

**PATTY JARAMILLO,** Founder, Creative IT Marketing

A common CIO lament is that the business and financial sides of the house don't understand IT—but

Jaramillo's recent study shows that most CIOs do not have a plan in place for internal marketing communications for IT. To be successful, you need to continually educate the business side to IT value, and you need to do it in terms they understand. Jaramillo talks about the importance of being an active communicator, and shares techniques and tools that have worked for a number of organizations.

3:45 pm–4:45 pm  
**Developing the Next Generation of IT Leaders**

**Moderator: RICK SWANBORG,** President, ICEX  
**Panelists: DAVID GUZMAN,** Senior Vice President & CIO, Owens & Minor

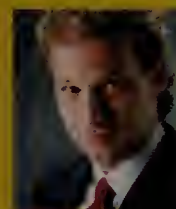


**EDWARD L. GLOTZBACH,** Executive Vice President & CIO, SBC

**MICHAEL HARTE,** CIO, PFPC  
**MAMIE MILLARD,** Senior Vice President, Technology, Travelocity.com

In addition to honing their own leadership abilities, CIOs are concerned with identifying and developing effective leaders in their organizations. Swanborg and a panel of CIOs discuss the challenges involved, and share the techniques they've used to mold the next generation of IT leaders.

4:45 pm–5:30 pm  
**How to Get a Life**  
**DR. RICK BRINKMAN,** Author of Life By Design: Making Wise Choices in a Mixed-Up World



With the Internet, cell phones, laptops, wireless and loads of other nifty gadgets, we can now work anytime from anywhere in today's 24/7 global business environment. Dr. Rick looks at why it's increasingly important to maintain a healthy balance between Life and Work.

5:30 pm–5:45 pm  
**Closing Summary**  
**JONATHAN ZITTRAIN**

5:45 pm–6:45 pm  
**Networking Reception**

7:30 pm–9:30 pm  
**CIO Dinner Party**

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## CIO Contact Information

Editorial, Advertising and Business  
Offices: 492 Old Connecticut Path,  
P.O. Box 9208, Framingham, MA  
01701-9208, 508 872-0080.

CIO (ISSN 0894-9301) is published  
semimonthly and as a combined issue  
December 15/January 1 by CXO Media  
Inc., 492 Old Connecticut Path, P.O.  
Box 9208, Framingham, MA 01701-  
9208. Periodicals postage paid at  
Framingham, MA, and at additional  
mailing offices. Canada Publications  
Mail Agreement Number 1902075.  
CANADIAN POSTMASTER: Please  
return undeliverable copy to P.O. Box  
1632, Windsor, ON N9A 7C9.

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60065-9816. Printed in the U.S.A.

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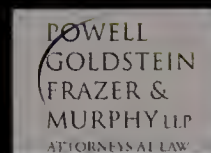
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# EXECUTIVE Summaries

March 1, 2003

## COVER STORY | E-Government

By Todd Datz | 44

At the end of 2002, President Bush took a giant step toward launching the federal government into the information age by signing the E-Government Act into law. Its goals include allowing citizens easier access to the government's 22,000 agency websites and the ability to post commentary on pending legislation, as well as increased cooperation among those myriad agencies. It also calls for the creation of a new Office of Electronic Government, and provides the federal CIO Council—an interagency group of CIOs and deputy CIOs—with legal authority. But critics say the act does not go far enough. There is still no federal CIO, and bureaucratic realities will slow cross-agency cooperation. Although agencies will be prioritizing information security more than ever, some agencies are beginning their ascent to the security summit somewhere around sea level.

Inroads have been made. Improved customer service has already resulted in the Small Business Administration's [www.businesslaw.gov](http://www.businesslaw.gov) website, the Federal Emergency Management Agency's [www.disasterhelp.gov](http://www.disasterhelp.gov) website and the Department of Labor's [www.govbenefits.gov](http://www.govbenefits.gov) website.

**“The idea is for the federal government to take full advantage of the Internet and other information technologies to improve its efficiency and to secure its electronic information.”**

—SEN. JOE LIEBERMAN (D-CONN.),  
AUTHOR OF THE E-GOVERNMENT ACT

## Outsourcing

By Stephanie Overby | 54

**“REINSOURCING”** is on the increase as more and more outsourcing arrangements fail to meet expectations for savings and service levels. At Farmers Group, work originally outsourced to save money was actually escalating costs. Confident in its own low-cost IT capability, Farmers insourced the work. The trick to rehiring former employees that had been outsourced was to appeal to them on an emotional level. Farmers' CIO promised them stable positions at a company that cared for its employees. To wrest back control over its own network and Internet services from an inflexible outsourcer, the CIO of Chicago's Metropolitan Pier Exposition and Authority had to fight against badmouthing by a vendor unwilling to let go. She prepared a proof of concept for insourcing, demonstrating the competence and capability of her staff during one of the city's biggest expositions.

## Integration Case Files: Maricopa County

By Todd Datz | 65

**SERVING ONE OF THE FASTEST** growing population centers in the nation has put a strain on the criminal justice infrastructure in Arizona's Maricopa County. Redundant data collection, error-prone manual data entry, ad-hoc interfaces, lack of a unique common identifier and no sharing of information across departments were some of the problems causing the system to buckle under the strain. With a \$25 million appropriation, the county formed a cross-departmental group, the Integrated Criminal Justice Information System (ICJIS) agency, to develop convergent architecture that would improve data sharing among the county's five major criminal justice agencies. ICJIS standardized on a J2EE development environment with a middleware layer for data and an EAI system. It also replaced a procedural programming environment based on specific programming languages with a business rules environment based on processes, the better to simplify interaction on integration projects. Case commentator Carolyn Purcell, CIO of the state of Texas, says the data modeling approach and emphasis on governance should serve Maricopa well in its integration efforts.

## Chargeback Management

By Malcolm Wheatley | 70

**CHARGEBACK**, literally charging the user departments on whose behalf IT costs are incurred, is a tempting practice when IT budgets are under pressure. But chargeback can become a political hot potato and lead to inefficiencies and administrative nightmares. Basing chargeback rates solely on headcount is problematic because people consume IT at different rates. Efficient server utilization could suffer: With one server per application or unit, chargeback is easy to figure, but consolidate multiple apps on a server and you invite arguments over apportioning. Administering chargeback accounting can get so complicated that it diverts scarce IS resources away from their core mission. Some CIOs work around those problems by emphasizing simplicity. They charge only for nonshared IT expenses or applications. Central overhead such as network costs can be allocated by headcount.

## Emotional Intelligence

By Meridith Levinson | 78

**THE TERM** *emotional intelligence* (E.I.) refers to a person's ability to take control of situations by tuning in to and managing one's own and others' emotions. Leaders can use E.I. to mitigate the emotional toll personal problems and organizational changes like layoffs and mergers can have on those involved. It can help keep employee turnover low and projects on track. For example, the CIO of GE Commercial Distribution Finance minimized the negative impact of a valued employee whose divorce was affecting her performance and managed to see her through the problem period. CIOs who don't naturally possess high E.I. can acquire the skill. The first step is assessment, and an IT-related E.I. self-scoring quiz is included in this story.



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